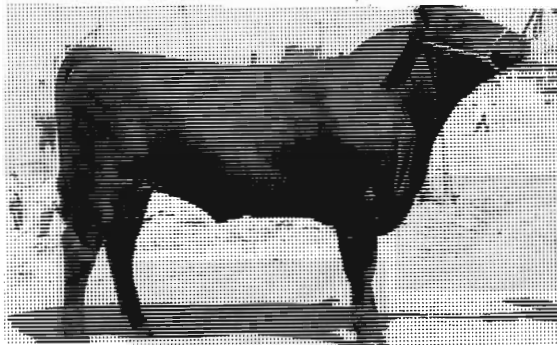


Lincoln University

Alumni Magazine
1990

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ALUMNI MAGAZINE 1990

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STAFF

This list is compiled as at 1 October 1990, but includes staff known to be taking up appointment after that date, and includes redesignations known to be occurring after that date

Emeritus Professors

John W. McLean BVSc(Syd) MAgrSc(NZ) PhD(Calif) Veterinary Science (Emeritus Professor since 1970)
Sir James Stewart MA(NZ) PhD(R'dg) Dip VFM (CAC) FNZIAS FNZSFM Farm Management (Emeritus Professor since 1974)
Ian E. Coop OBE MSc(NZ) DPhil(Oxf) HonDSc(Cant) FNZIC FNZIAS Animal Science (Emeritus Professor since 1978)
Thomas W. Walker PhD DSc(Lond) DIC ARCS FNZIC FNZIIAS Soil Science (Emeritus Professor since 1979)
Alexander E. Henderson BAgSc(NZ) PhD(Lond) Wool Science (Emeritus Professor since 1981)
Bruce J. Ross MAgrSc(Cant) Agricultural Economics (Emeritus Professor since 1983)
Reinhart H.M. Langer OBE BSc(Hons) PhD(Durh) FRSNZ FANZAAS FNZIAS Plant Science (Emeritus Professor since 1984)
Bernard H. Howard BSc(Manc) PhD(Lond) CChem FRSC FNZIC Biochemistry (Emeritus Professor since 1986)
Clifford H.G. Irvine BVSc(Syd) BSc DSc (Otago) FACVSc Veterinary Science (Emeritus Professor since 1987)
A. Paul Mulcock MSc PhD(NZ) Microbiology (Emeritus Professor since 1990)

TEACHING AND RESEARCH

The year shown is the year of taking up appointment. The abbreviations shown here for degree and diploma granting institutions are those used by the Association of Commonwealth Universities in its annual 'Commonwealth Universities Yearbook' and are not necessarily those of the institutions themselves.

Accounting and Valuation

Professor of Finance and Accounting and Head of Department

Appointment pending

Professor of Real Estate, Valuation and Property Management

1989 John S. Baen BS MUP PhD (Texas A&M)

Visiting Professor of Accounting

1990 Paul Krause BS MAS PhD (Wisconsin)

Senior Lecturers

1978 Murray B. Clark MCom(Cant) ACA
1978 Cedric S. Croft BAgCom(Cant) ANZIV
1987 Everard G. Moorhead BAgSc(Cant) ANZIV ValProf(Rural)
1978 Derek L. Newman BAgSc BCom(Cant) MBA(Calif) ValProf(Rural) ACA MNZFM

Lecturers

1985 Stephen W.G. Binnie NZIVProf(Urban) ANZIV MPPI
1988 David C. Hay BCom(Otago) MCM(Cant) ACA, ACIS, ANZIM, CIA, CMA
1990 Robert Ivory BSc(Cant) BBS(Massey) BPMI
1986 Despina Kerdelididis MCom(Cant) ACA
1990 John McDonagh BBS(Massey) MPPI
1982 P. Brent Nahkies BCom(VPM)(Cant) NZIVProf(Urban)
1987 Jack J. Radford BCom(Otago) ACA CMA
1990 Peter G. Seed MCom(Ag)(Cant)

Technical Officer

1982 Bruce J. Fraser

Animal and Veterinary Sciences Group

Chairman

Professor Andrew R. Sykes

Professor and Head of Department

1978 Andrew R. Sykes DSc(Wales) PhD(Edin) FRSA

Senior Lecturers

1976 Graham K. Barrell BSc DipSc PhD(Massey)
1969 Denis G. Elvidge MAgrSc(Cant)
1981 Alex S. FAMILTON BVSc (Hons)(Syd) MACVSc
1988 S. Ravi Gooneratne BVSc(SLanka) Dip Tox (Sask) PhD(Murd)
1977 Terence P. Hughes MAgrSc(Massey)
1968 Alastair M. Nicol BSc(Glas) MAgrSc(Cant) PhD(Alta)
1981 Keith F. Thompson BAgrSc(Cant) CertWool

Lecturers

1981 Philip R. Beatson BAgrSc(Hons)(Cant)
1987 Mark J. Young BAgrSc(Hons)(Cant) MSc(Edin) PhD(Cant)

Senior Research Officer

1988 Robin G. McFarlane BVSc(Massey) PhD(Missouri) MRCVS

Senior Tutor

1981 Lynda J. Wiltshire DipAgr DipFieldTech

Teaching Fellows

1986 Timothy J. Harrison MSc(Natal)
1988 Suporn Limsirichaikul BEd(Srinakarinwirot) MSc(Kasetsart)

Computer Programmer

1988 Stephen T. Bell BSc(Cant)

Senior Technical Officers

1967 Nigel P.W. Jay NCA

Technical Officer

1986 Peter Isherwood HNC(UK)

1978 Robin W. McAnulty BSc(Cant)

Postdoctoral Fellow

1990 Takahito Kambara MSc PhD(Nippon VeZ) DVM

Biochemistry and Microbiology

Professor of Biochemistry and Head of Department

1988 David W. Bullock MAgrSc(R'dg) PhD(III) DSc(Nott)

Readers

1973 Roy Bickerstaffe BSc(Hons) PhD(Liv)

1973 Ronald C. Close MSc(NZ) PhD(Lond)

1975 Roy E. Gaunt BSc(Hons)(Wales) PhD(S'ton)

Senior Lecturers

1970 Maurice F. Barnes BSc(Hons) PhD(Brist) MNZIC

1971 Michael J. Noonan BSc(Hons) PhD(Cant)

1979 Geoffrey P. Savage BSc(Hons) PhD(N'cle UK)

Assistant Lecturer

1989 Jonathon G.H. Hickford BSc(Hons)(Cant) PhD(Otago)

Tutors

1985 Marlene Jaspers BSc(Hons)(Cant)

1980 Susan L. Mason BSc(Hons)(Q'ld)

1982 James D. Morton MSc(Otago) PhD(Cant)

Research Officer

1989 Keith H.R. Baronian BSc DipSci(Otago) DipTchg

1989 Anoma D. Gooneratne BVSc(S Lanka) PhD(W Aust)

Post-Doctoral Fellows

1988 Sami B.M. Damak MD(Tunis)

1990 Klaus Felix DipBio(T'bingen)

1989 Christopher Molloy BSc(Hons) PhD(Otago)

Technical Officer

1975 Christopher O. Dawson BSc(Cant) MAppIsc(Cant)

The Centre for Computing and Biometrics

Director

1981 Alan E. McKinnon BE PhD(Cant) (Director since 1986)

Senior Lecturers

1990 Elizabeth A. Kendall BS(MIT) ME PhD(Carl Tech)

1970 B. George Love BSc(Nott) MAgrSc(Cant) DipEd(Massey)

1982 A. Bruce Robson MSc(Cant)

1986 J. Richard Sedcole MAgrSc(Massey) PhD(Iowa State)

Lecturer

1989 Walt Abell BS(Calif)
1990 G. Don Kulasiri BSc(Perad'ya) MS(Virginia Tech)
1987 Theresa J. McLennan BSc(Hons) PhD(Cant)

Tutor

1988 Peter A.T. McNaughton BHortSc(Cant) Systems Manager

Systems Manager

1988 William J. Rosenberg BSc(Hons) PhD(Cant)

Senior Computer Consultants

1987 John R. Baird BAgrSc(Massey) MAppIsc(Cant)
1972 Martyn S.C. Brown BSc(Hons)(Cant)

Senior Computer Consultant (Part-time)

1984 Margaret A. Quince BSc(Cant)

Computer Consultants

1987 Philippa J. Hamel BSc(Cant)
1986 Paul A. Helleur NZCertDP
1982 Brenda I. Lord

Technical Officer

1989 David I. Vercoe Radio Tech Cert, Radio Electronic Cert

The Centre for Resource Management

(in collaboration with the University of Canterbury)

Director

1964 John A. Hayward MAgrSc PhD(Cant) (Director since 1979)

Professor of Range Management

1969 Kevin F. O'Connor BA BAgSc(NZ) PhD(C'nell) FNZIAS

Principal Management Officer

1976 I.G. Christopher Kerr BAgSc(Cant) MNZSFM MNZIAS

Senior Research Officers

1987 Maurice Manawaroa Gray LTh(JtBdTheolSt) (Tohunga Ahuarewa)

1978 Brian T. Robertson DipAgr DipVFM CertWool

Research Officers

1976 Peter Ackroyd MSc(Cant)DipTchg

1983 Janet D. Gough BSc MCom(Cant)

1984 Rodney P. Hide MSc(Cant)

1982 Geoffrey N. Kerr MA(Cant)

1990 Ian G. McChesney BE(Cant)

1980 Jonet C. Ward MSc(McGill) PhD(Cant)

1986 Tracy A. Williams BSc(Hons) DipJ(Cant)

1986 Janice C. Wright BSc(Hons)(Cant) MS(Calif) DipTchg

Assistant Research Officer

1987 Carolyn J. Blackford BA MSc(Cant) NZPI

1990 Angus E.C. Fahy BAgSc(Hons)(Cant)

Economics and Marketing

Professor of Marketing and Head of Department

1977 Tony C. Zwart BAgSc(Cant) MSc PhD(Guelph) (Professor since 1984)

Professor of Economics

Appointment pending

Readers

1983 Ralph G. Lattimore BAgSc(Cant) MAgrSc(Massey) PhD(Purdue)

1961 Alastair T.G. McArthur BSc(Agric)(Lond) MAgrSc(NZ) PhD(Cant)

Senior Lecturers

1973 Peter W. Cosgriff BAgSc(NZ) DBA FNZIM

1990 Paul L. Dalziel MCom(Cant) PhD(Otago)

1980 Lyn A. Holland BA(NZ) LTCL

1981 Rodney L. St Hill BCom(Hons)(N'cle NSW) PhD(Cant)

1982 Bert D. Ward BA(SCol) MA(NCol) MLitt(Aberd)

1972 John W. Wood BSc(Agric)(Lond) MSA(Tor)

1965 Les D. Woods MAgrSc(Cant)

Lecturers

1984 Rodney P. Hide MSc(Cant)

1984 Charles G. Lamb BCom(Ag)(Cant)

1990 Daniel A. Sauers BS(Slippery Rock) MBA PhD(Florida State)

1990 Lesley E. Williams MCom DipMgt(Otago) DipTchg

Senior Tutor

1986 Michael D. Clemes BSc(Colorado) MCom(Ag)(Cant)

Education Unit

Director

1968 Graham F. Tate BA MSc(Cant) DipVFM (CAC) FNZSFM (Director since 1987)
(see also UNIVERSITY SERVICES AND SERVICE UNITS)

Entomology

Professor and Head of Department

1973 David R. Penman MAgrSc(Cant) PhD(Wash State) (Professor since 1985)

Senior Lecturers

1978 R. Bruce Chapman BSc MAgrSc(Cant)
1968 Rowan M. Emberson BSc(Hons)(For)(Edin) PhD(McG)
1970 R. Roderic Scott MSc(Auck) PhD(Cant) DipTchg
1973 John B. Waller BSc(Hons)(Lond) PhD(Iowa)

Lecturer

1986 Kerry-Jayne Wilson MSc(Cant)

Senior Tutors

1977 Michael R. Butcher MSc(Massey) PhD(Cant)
1978 Susan P. Worner BSc(Hons)(Cant)

Tutor

1978 John W. Early MSc(Cant)

Technical Officer

1982 Michael H. Bowie NZCS NZDS

Farm Management

Professor and Head of Department

1987 Anthony C. Bywater BSc(R'dg) PhD(Nott)

Readers

1964 Gerald A.G. Frengley MAgrSc PhD(Cant) DipVFM(CAC)
1972 Peter L. Nuthall MAgrSc PhD(Cant)

Senior Lecturers

1964 Neil G. Gow BAgrSc(NZ)
1984 John K. Lay
1988 Sandra K. Martin BEcon(Q'ld) MA PhD(Cant) DipTchg
1978 Stewart F. Pittaway MAgrSc(Cant) MNZSFM
1967 Roderick D. Plank BA(Cant) DipVFM(CAC) ANZIV MNZSFM

Lecturers

1985 Peter H. Fleming BAgrSc(Cant)
1987 Peter F. Gaul BAgrSc(Cant)
1986 Peter R. McCrea MCom(Ag)(Cant) DipTchg
1987 Elizabeth S. Burt MAgSc(Cant)

Post-Doctoral Fellow

1980 Oscar J. Cacho MSc PhD(Au)

Horticulture

Professor and Head of Department

1979 Richard N. Rowe BAgrSc(Melb) MS PhD(Calif)

Senior Lecturer and Assistant Head of Department

1977 Rupert S. Tipples MA PhD(Camb)

Readers

1968 David I. Jackson MAgrSc(Hort)(NZ) PhD(Adel)

1962 Graham F. Thiele MHortSc(Cant)

Senior Lecturers

1966 Robert A. Crowder BSc(Hons)(Nott)

1978 Michael J.S. Morley-Bunker MSc(Lond)

1974 Richard B. Stevens BHortSc(Hons)(Cant)

1971 Michael B. Thomas MHortSc PhD(Cant) DipHort NDH

Lecturers

1975 Roy A. Edwards DipHortSc(Cant) DipHort NDH FRIH

1981 Dennis J. Farr BHortSc(Hons)(Cant)

Senior Tutor

1981 Miranda B. Shaharudin BHortSc MAppSc(Cant)

Tutors

1984 Pamela J. Gibbons DipHort(Kew) DipHort NDH

1981 Catherine M. Owens y de Novoa MAgrSc(Cant)

1982 David L. Shillito DipHort DipHortMgt FRIH

Senior Technical Officer

1963 Graeme F. Steans PGDipHortSc(Cant) NZCS

Technical Officer

1974 Mervyn I. Spurway NZCS NDN FRIH ANZIST

Practical Work Tutor (Part-time)

1978 Caroline M. Steans DipHort

Landscape Architecture

Senior Lecturer and Head of Department

1982 Simon R. Swaffield MA(Camb) DipLD(Manc) DipTP(H-W) ANZILA ALI

Senior Lecturers

1986 Graham H. Densem BA DipLA(Cant) ANZILA

1986 Valerie G. Kirby BA DipTRP(Sheff) DipLA(Birm) MRTPI ALI ANZILA

Lecturers

1986 Michael R. Barthelmeh BHortSc DipLA(Cant) ANZILA

1989 Lisa J. Gelfand BA MArch(Yale)

Assistant Lecturers (Part-time)

1990 Maurice R.J. Angelo DipFA DipLA(Cant) DipTchg

1990 Jule R. Einhorn DipFA(Cant)

Natural Resources Engineering

Reader and Head of Department

1969 David J. Painter BE(Hons) PhD(Cant) MIPENZ (Head of Department since 1989)

Professor

1971 Gerald T. Ward BSc(Eng)(Glas) PhD(Durh) CEng FIPENZ FIMechE MemASAE

Reader

1975 Timothy R.H. Davies MSc PhD(S'ton)

Senior Lecturers

1974 Neil J. Cherry BSc(Hons) PhD(Cant) FRMetS MAMetSoc

1972 Richard E. Chilcott BSc(Eng)(Lond) MSc(McG) DIC CEng MRAS

1979 Andrew J. Dakers ME(Cant) MIPENZ

1970 Donald W. Mackenzie BE(Cant) MIPENZ

1986 F. Desmond Maslen FRICS FNZIQS AArbINZ

Lecturers

1985 Larry Bellamy BE(Hons)(Cant)

1986 Ian R. Domigan BS ME(WVirginia) Mem ASME

1989 Graeme A. Martin BE(Cant)

Senior Tutors

1967 David J. Ballisat FNZIW REA

1966 Paul M. Seaton

1967 Russell P. Short MNZIW

Tutor

1980 Ian W. Clarke

Postdoctoral Fellow

1989 Jeff Warburton BSc(Hons)(Wales) MA(Colorado) PhD(S'ton)

Technical Officer

1973 Kelvin W.C. Nicolle

1985 Lubomír Mlcoch ME(Ag)(Prague)

Parks, Recreation and Tourism

Reader and Head of Department

1986 J. Grant Cushman MSc PhD(III) DipPE(Otago) DipTchg

Senior Lecturers

1977 Patrick J. Devlin MA(Cant) PhD(Colorado State) DipTchg FRIH

1989 Robert G.A. Gidlow MA(Kent)

1988 Richard E. Mansell BEd (Br.Col.) MSc(III)

1978 Alan R. Taylor MA(Cant) DipTchg DipCRS MIPRA

Senior Lecturer (Part-time)

1989 Ray H. Murray MA(Cant) Dip Tchg

Lecturers

1987 Bronwyn M. Hayward MA(Otago)ASB

1989 Helen McGregor BA(Cant) DipTchg

1988 Harvey C. Perkins MA(Otago) PhD(N Carolina Chapel Hill) Dip Arts(Otago) Dip Tchg

1990 Philippa M. Lynch BPhEd, DipGrad(Otago)

1981 David G. Simmons BSc MAppSc(Cant) PhD(Wat)
1985 Clare S. Simpson MA(Cant) DipTchg ATCL

Lecturer (Part-time)

1989 Brett H. Riley BA(Calif)

Assistant Lecturer

1988 Anne C. Hindson BA(Cant) DipTchg ATCL

Tutor (Part-time)

1990 Robin J. Curtis DipTchg

Plant Science

Professor of Plant Science and Head of Department

1970 Roger J. Field BSc(Hons) PhD(Hull)
(Professor since 1986)

Professor of Agronomy

1956 James G.H. White MAgrSc(NZ) PhD(Adel)
(Professor since 1982)

Reader

1965 Gavin T. Daly MAgrSc(NZ) PhD (McG)
1972 George D. Hill RD VRD MSc(Agric)(WAust)

Senior Lecturers

1964 Aldo G. Fautrier BScA BSc(Montr) PhD(Cant)
1972 Peter Jarvis BSc(Hons) PhD(Lond)
1974 Richard J. Lucas BAgSc(Cant) DipTchg
1987 David L. McNeil BSc(Hons) PhD(WAust)
1970 Warwick R. Scott MAgrSc PhD(Cant)
1967 Michael L. Smetham BSc(Agric)(Lond) MAgrSc(Cant)

Lecturers

1986 Mitchell H.G. Andrews BSc(Hons) PhD(Dundee)
1986 Bruce A. McKenzie BS(Penn State) PG DipAgrSc PhD(Cant)

Assistant Lecturer

1989 Jonathon G. Palmer MSc PhD(Auck) DipTchg

Senior Tutor

1972 Philippa E. Horn BSc(NZ)

Tutor

1982 Dougal I. Robertson DipAgr DipVFM

Senior Technical Officers

1956 Gerardus Meijer DipStateAgricColl(Dortrecht) ANZIST
1975 D. Bruce Pownall DipFieldTech NZCSI
1965 Brian E. Smith NZCS ANZIST

Technical Officer

1970 Alexander V. Jones NZCS

Resource Studies

Reader

1990 Christopher C. Kissling MA(Cant) PhD(McGill)

Soil Science

Professor and Head of Department

1990 Ian S. Cornforth BSc(Hons)(Durh) PhD(Lond)

Readers

1959 Alistair S. Campbell MSc(NZ) PhD(Cant) FNZIC

1971 Kuan M. Goh JP MAgrSc(NZ) PhD(III) FNZIC

1981 Ronald G. McLaren BSc(Hons)(Lond) PhD(Nott)

Senior Lecturers

1976 John A. Adams BSc(Hons) PhD(Cant) MNZIC

1986 Graeme D. Buchan BSc(Hons) MSc PhD(Aberd) CPhys FRMetS MInstP

1981 Keith C. Cameron BSc(Hons)(Aberd) PhD(R'dg)

1968 Lawrence G. Livingstone BSc(Otago) MAgrSc PhD(Cant) MNZIP

1969 Philip J. Tonkin MSc(Well) PhD(Cant) MNZIAS

Lecturers

1990 Peter C. Almond BSc(Hons)(Massey)

1986 Roland Harrison BSc(Hons) PhD(Birm)

1978 Robert R. Sherlock MSc PhD(Cant) DipTchg MNZIC FBIS

Senior Tutor

1984 Robert L. Leonard MF(Yale) BSc PhD(Calif)

Tutor

1974 Roger D. McLenaghan NZCS

Senior Technical Officer

1960 Robin J. McPherson NZCS ANZIST

Technical Officer

1970 Alan C. Wise NZCS

Research Associate

1989 Leo M. Condrón BSc(Hons)(Glas) PhD(Cant)

Wool Science

Reader and Head of Department

1977 Barry R. Wilkinson MAgrSc(Cant) PhD(Lond)
(Head of Department since 1982)

Professor

1982 Donald A. Ross MAgrSc(Massey) PhD(Leeds) CText FTI

Lecturers

1990 Peter A. Maher BSc(Hons)(NSW)

1986 R. Hedley Sanderson MAppSc DipAgrSc(Cant) CertWool DipWoolTech

Senior Tutors

1976 Patricia A. Campbell BSc(Hons) DipWLM(Otago) PhD(Cant) DipWoolTech

1970 Bruce M. Tinnock DipWoolTech CertWoolclassing

Tutor (Part-time)

1990 Bruce C. Blazey

Senior Technical Officer

1978 Fraser J. Aitken

Honorary Lecturers

Henry E. Connor DSc(Cant)
Michael W. Dunbier MAgSc(Cant) PhD(Wis)
Eric J. Godley MSc(NZ) PhD(Camb)
Warwick Harris BSc(Hons) PhD(Cant)
Terence D. Heiler BE(Hons)(NSW) PhD(Cant) ASTC MIE(Aust) MIPENZ
A. David H. Joblin BAgSc(NZ) DipTropAg(Trin)
John Y. Morris MSc(NZ) DipIng(NFN)
W. Stanley Simpson MSc(NZ) PhD(Leeds) FNZIC ANZIM
Harvey C. Smith MAgSc(NZ) PhD(Camb)FNZIAS

ADMINISTRATION AND SERVICES

Library

University Librarian

1988 Ainslie J. Dewe BSc(Cant) Dip NZLS ANZLA MIInfSc

Senior Associate Librarian

1980 Anne-Maree Scott BSc(Cant) DipLib(Well)

Senior Librarian (Collection Management)

1978 Gavin B. East MA(Cant) DipTchg DipNZLS

Senior Librarian (Information Services)

1989 June A. Laird BA DipArts(Otago) NZLSCert

Senior Librarian (Serials)

1990 Adriana de Groot BSc(Hons)(Cant) DipLib(Well)

Senior Librarian (User Services)

1986 Lyndsay L. Ainsworth BA(Cant) NZLSCert

Assistant Librarian (Information Services)

1990 Coralie L. Campbell BSc(Cant) DipLib(Well)

Administration

Vice Chancellor

Emeritus Professor Bruce J. Ross MAgSc(Cant)

Pro Vice Chancellor

Professor Andrew R. Sykes DSc(Wales) PhD(Edin) FRSA

Registrar

1989 Allan J. Sargison BA(Hons)(Otago)

Senior Administrative Assistant

1971 Beverley J. Atkinson (Vice Chancellor's Secretary)

Administrative Assistant

1979 Carol V. Kingsland (Registrar's Secretary)

Academic Section

Academic Registrar

1987 Roger A. Smyth BA(Hons)(Well) DipTchg

Assistant Registrar (Academic)

1990 Bonny Le Grice BA MEd(Cant) DipTchg DipSpEd Adv DipEd

Senior Administrative Assistant

1980 Christopher K. Adams BA(Cant) DipTchg (Examinations)

Administrative Assistants

1987 Cathy A. Stewart BA(Cant) (Admissions and Records)

1990 Karen M. Townley (Admissions and Scholarships)

1990 Margaret L. Wade-Wilson BA(Cant) (Fees and Allowances)

Finance Section

Finance Registrar

1986 Andrew R. Donnithorne BCom(Cant) ACA ACIS CMA

Assistant Registrar (Finance)

1976 Lawrence J. Dawson BCom(Cant) ACA ACIS

Purchasing Officer

1971 Norman Crosby MNZIPS

Personnel Section

Personnel Registrar

1982 Paul D. Bradley BA(Cant) DipTchg ANZIM MIPMNZ

Senior Administrative Assistant (Personnel)

1978 Jeremy M. Draper BCom(Cant) ANZIM AIPMNZ

Computing Section

Head of Registry Computing

1987 Helen J. Instone BSc(Cant) Data Processing Officer

1976 Ian P. Johnson MNZCS

Printery and Bookshop Manager

1986 Gary J. Skinner

Works and Services Section

Works Registrar

1986 Russell W. Englefield NZCE REA

Works Engineer

1962 Brian Osborne

Senior Technical Officer

1964 Richard E. Lowen

Custodian

1981 Ronald G. Fleming

Grounds Supervisor

1978 Martin J. Capstick DipHort(Wisley) NCH

Telephonist

1969 Noeline V. Fauth

Office Services Unit

Manager

1985 Neil F. Voyce BCom(Cant) DipHA DipBusStuds(Massey) ACA ACIS

Pay Officer

1986 Paul W. McKay

Administrative Assistants

1978 Kevin M. Forman

1990 Paul D. O'Donnell BCom(Otago) ACA

1972 Rodger I. Treeby

Fees Officer

1981 Alys V. Allan ATCL

Community Relations

Director

1990 J. Paddy M. Austin MA PhD(Cant)

Liaison Officer

1987 Ronald H. Hickford MSc(NZ) DipEd(Cant) AIE(Lond) FNZIC

Careers Adviser

1974 Ormond M. Wilson MA(Massey)

Journalist

1987 Ian S. Collins

UNIVERSITY SERVICES AND SERVICE UNITS

Education Unit

Director

1968 Graham F. Tate BA MSc(Cant) DipVFM (CAC) FNZSFM (Director since 1987)

Senior Education Officer

1987 Neil D. Fleming MA(Cant) DipTchg

Senior Continuing Education Officer

1970 Don H. Crabb MBE ED

Technical Officer

1978 Peter J. Gatehouse BSc(Cant) DipTchg

Property Management Service

Director

Roderick D. Plank (Department of Farm Management)

Equine Blood Typing Unit

Officer in Charge

Dr Robin G. McFarlane (Animal and Veterinary Sciences Group)

Veterinary Clinical Services

Officer in Charge

Dr Alex S. Familton (Animal and Veterinary Sciences Group)

Equine Research Unit

Officer in Charge

Emeritus Professor Clifford H.G. Irvine

Technical Services Unit

Officer in Charge

Phillip R. Beatson (Animal and Veterinary Sciences Group)

Wool Measurement Service

Supervisor (Part-time)

1983 Jennifer J. Nicol DipWoolTech Cert Wool RGN

Kellogg Farm Management Unit

Head

Dr Peter L. Nuthall (Department of Farm Management)

Senior Computer Consultant

1980 Peter R. Oliver BCom MAppSc(Cant) DipAgr DipVFM

Client Services Manager

1990 Sinclair J.R. Hughes DipAgr DipFM ANZIM

Distribution Officer

1985 Sheryl A. Frew BCom(Ag)(Cant)

Consultants (Computer Programs)

1989 Peter J. Campbell BCom(Ag)(Cant)

1985 Mark R. Harris DipAgr DipFM

Consultant (Computer Programs) (Part-time)

1989 Kathleen M Varcoe BSc (Otago)

Farm Advisory Service

Senior Consultant (Farm Management)

1970 Anthony C.W. Whatman BAgrSc(NZ) MNZSFM

Consultant (Farm Management)

1979 Adam J.A. Spiers BAgrSc(Cant) MNZSFM

Consultant (Horticultural Management)

1983 Keith A. McIntosh BAgrSc(Cant)

STUDENT AND WELFARE SERVICES

Union and Halls

Head of the Union and Halls Complex

1986 Paul F. Claridge MA(Well) DipPE(Otago) DipTchg ANZIM

Union Administrator

1990 Patrick J. Lyons

Halls Administrator

Appointment Pending

Conference and Functions Officer

1986 Faye M. McGill

Catering Manager

1984 Holder Frey

Senior Residential Assistants

1989 Catherine L. Hamilton

1989 Timothy J. Harrison MSc(Natal)

Welfare Services

Medical Officers (Part-time)

1978 J.A. Ross Fountain MB ChB DipObst(Otago) DCH(RCP Lond & RCS Eng) MRNZCGP
1978 Anna D. Holmes MB ChB(Edin)
1978 Gerald S. Irwin MB ChB DipObst(Otago) MRNZCGP
1980 Lloyd M. Phillips MB ChB(Otago) DCH(RCP Lond & RCS Eng) MRCP
1985 Jeffrey C. Shortt MB BChir(Camb) DipObst(RCOG) MRCP

Counsellor

1984 Teresa M. Gourley MA(Auck) DipTchg MNZPS

Supervisor

1980 Shirley J. Warren RGN RMN

Nurses (Part-time)

1989 Alison J. Hume RGN RMN
1985 Heather J. Woods RGN&M

Recreation Centre

Recreation Officer

1978 David C. Leary DipPhysEd(Otago) DipEd(Cant) DipTchg

Proctor

Donald W. Mackenzie (Department of Natural Resources Engineering)

FARMS

Farm Managers

Ashley Dene

1987 Kenneth A. Townley

Dairy

1988 Andrew B. Wright DipAgr DipFM

Mixed Cropping

1977 S. John McCartin

Research Unit

1988 William D. Pickering

Sheep Breeding Unit

1985 Ross McN. Wilson

Lincoln Springs Orchard

1983 Hamish D. Cattell

Farm Information Officer (Part-time)

1988 Patrick J. McCartin BAg(Cant)

Horticultural Research Area

1983 Keith A. McIntosh BAgrSc(Cant)

RESEARCH UNITS AND INSTITUTES

Plant Protection Research Unit

Directors

R. Bruce Chapman (Department of Entomology)
Professor Roger J. Field (Department of Plant Science)
Dr Roy E. Gaunt (Department of Biochemistry and Microbiology)
Professor David R. Penman (Department of Entomology)

Management Officer

Dr Michael R. Butcher (Department of Entomology)

The Agribusiness and Economics Research Unit

Director

Professor Anthony C. Zwart (Department of Agricultural Economics and Marketing)

Assistant Director

1979 Ronald L. Sheppard BAgrSc(Hons)(Cant) BBS(Massey)

Research Officers

1989 Hugh R. Campbell BA(Hons) MA(Otago)
1984 John R. Fairweather BA BAgrSc(Cant) MA PhD(Missouri)
1985 Glen Greer BAgrSc(Hons)(Cant)
1989 Lorna M. Urquart BCom(Ag) PGDipCom(Cant)

The Agricultural Engineering Institute

Director

1966 Terence D. Heiler BE(Hons)(NSW) PhD(Cant) ASTC MIPENZ (Director since 1983)

Senior Engineers

1974 Vincent J. Bidwell BE(Hons) PhD(Auck) MIPENZ (Research and Development Manager)
1983 Peter H. John BEng(Hons) PhD(Wales) MICE MIPENZ CEng (Commercial Manager)
1964 Graham M. Garden BE(Cant) DipAgr(CAC) MIPENZ (Corporate Services Manager)
1980 D. Neal H. Borrie BE(Cant) MIPENZ
1971 Peter S. Carran ME(Cant) MIPENZ
1975 Lindsay E. Kerr BE(Hons)(Cant)
1975 John F. Maber BAgrSc(Massey) DipAgEng ASAE
1981 Neil F. Pasco BSc(Hons) PhD(Otago)
1982 Graham C. Pinnell BE(Hons)(Cant)
1987 Roger W.J. Young MA(Camb)

Engineers

1985 Gregory F. Barkle BE(Hons)(Cant) MSc(Ohio State)
1986 Frank Bollen BE(Hons)(Cant) PhD(Guelph)
1987 John C. Bright BSc BE(Hons) PhD(Cant)
1984 Philip A. Dewar BE(Cant)
1989 Robert J. Potts BE(Hons)(Cant) NZCE MIPENZ
1988 Clifford J.M. Tipler BSc BE(Hons)(Cant) MIPENZ
1976 Ian M. Woodhead BSc(Cant)

Development Engineer

1965 Richard J. Harwood

Australian Representative

1973 Trevor H. Pratt

Research Officer

1989 Grant M. English

Senior Technical Officers

1970 Russell F. Horrell DipAgr(CAC)
1968 John J. Van Boven (Workshop Foreman)

The New Zealand Mountain Lands Institute

Principal Management Officer

I.G. Christopher Kerr (Centre for Resource Management)

Executive Officer

Brian T. Robertson (Centre for Resource Management)



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AROUND THE DEPARTMENTS

SOIL SCIENCE



Dr Keith Cameron and Dr Ron McLaren

1990 has been a busy year for members of the Department of Soil Science. For most of the year, until the appointment of Ian Cornforth to the Chair of Soil Science, the Department was without a permanent Head. Professor Ian Cornforth took up his appointment in late September and is now rapidly finding his feet. Ian comes originally from Britain where, after graduating with a B.Sc. from Durham University, he carried out research for a Ph.D. at Rothamsted Experimental Station. After periods of teaching and research at the University of the West Indies in Trinidad and Queens University, Belfast, Ian arrived in New Zealand in 1974 to join the MAF at Invermay. This was followed by a period at Ruakura, and since 1988, Ian has been based at MAF head office in Wellington, where he was the National Science Programme Manager for Soils and Plants. While

with the MAF Ian was one of the main forces behind the development of the computerised fertiliser recommendation scheme. He brings to the Department a wealth of experience in soil fertility and nutrient cycling and considerable administrative expertise.

In the period between Professor Roger Swift's departure and Professor Ian Cornforth's arrival, Dr Kuan Goh was appointed acting Head of Department and carried out a difficult job extremely effectively. As a mark of their appreciation for his efforts during this period, Kuan was presented with an illuminated address (in Chinese) by his colleagues.

Another new member of staff joined the Department in June. Peter Almond was appointed as Lecturer in Pedology as a replacement for Rob

Kemp. Peter is a Massey graduate (but we won't hold that against him, nobody is perfect!) and has been involved in soil survey work on the West Coast. In addition to his teaching duties, Peter hopes to complete a Ph.D. over the next few years, examining soil and site factors in indigenous forest management in South Westland.

The only other change of staff during the year was the retirement in early 1990 of Huntly Horn. Huntly joined the Department in 1958 and was, until his retirement, Officer in Charge of Chemical Services. Countless generations of postgraduate students have good cause to remember Huntly for his patient help and advice with their analytical problems. We wish Huntly well in his retirement.

February saw the appearance on bookshop shelves of 'Soil Science. An introduction to the properties and management of New Zealand soils' written by Dr Ron McLaren and Dr Keith Cameron. This textbook, published by Oxford University Press, is written specifically for New Zealand students and initial sales have been extremely encouraging. In addition to its use at Lincoln University, 'Soil Science' is already being used at other New Zealand Universities (including Massey).

Dr Ron McLaren returned from study leave in Western Australia in April but didn't stay long. He and Dr Kuan Goh took off for Japan in August to attend the 14th International Congress of Soil Science held in Kyoto. Before the

Congress, Kuan and Ron took part in a pre-Congress excursion to examine the soils and landscapes in the Tohoku region of Japan. They both presented papers at the Congress and Ron chaired a Symposium on 'Heavy metal accumulation in soils'. A poster paper presented by Ron, together with Anwar Ghani and Professor Swift, was awarded a prize for the best poster in the soil fertility section. Unfortunately the prize consisted of a set of illustrated books on Japan and Ron was charged excess baggage on the flight back to New Zealand!

Several other members of the Department have also left, or are about to leave, for periods overseas during 1990. Dr Alistair Campbell left in August to spend six month's study leave in Germany and Dr Phil Tonkin departed for the United States at the beginning of October, where he will attend several conferences and visit various university departments. Dr Keith Cameron will leave Lincoln in November for six month's study leave and will spend the bulk of his time in the Department of Soil Science at the University of Reading in England. Also in November, Dr Graeme Buchan is due to depart for California (and possibly Israel) to research current methods for irrigation scheduling, which might be applicable for use in New Zealand. Graeme will be away for about seven weeks and will also spend some time visiting Environmental Science Departments in British Universities.

Dr Roland Harrison, after being involved in a project examining flavour profiling of wine from local vineyards, is taking a much needed holiday in Britain over the Christmas period.

Not to be outdone by the academic staff, some of the technical staff have also ventured overseas this year. Maureen McCloy spent 6 weeks tramping in Nepal in April and May, and Leanne Hassall visited Bali on holiday in August.

As a final note on the staff, we can report that, at long last, the Department's most eligible bachelor is about to get 'hitched'. Roger McLenaghan is due to walk down the aisle in November.

1990 has seen the Department involved heavily in the promotion of 'Science' in schools. In May, Dr Graeme Buchan was the main organiser for a weeks environmental science course for 6th and 7th form pupils. The course was an outstanding success and involved pupils from all over New Zealand. During the course, the participants wrote an Environmental Charter for New Zealand which was presented to the Minister for Science (Margaret Austin) at the closing ceremony. The Minister promised to bring the Charter to the attention of her Cabinet colleagues at their next meeting.

In August, staff were also heavily involved in the New Zealand Science Teachers' Conference held in Christchurch. Both Graeme Buchan and Phil Tonkin gave lectures at the conference and Dr John Adams and Rob McPherson organised a 'water quality' workshop. A large group of the conference delegates visited the Department to see some of the current research work.

Dr Rob Sherlock put on a display outlining his work on gaseous nitrogen losses and Dr Keith Cameron put on a tour of the lysimeter laboratory.

The Department currently supports two Postdoctoral Fellows, 13 Ph.D., five Masters and two Honours students. The research programme of the Department continues to be extremely varied and at present includes studies on agroforestry, irrigation, nutrient leaching and cycling (particularly nitrogen and sulphur), alternative phosphate fertilisers and land resources.

ACCOUNTING AND VALUATION

1990 was a challenging year for the department with record numbers of students enrolling in Accounting, Finance, Valuation and Property subjects. Moderate growth in new staff positions was only out-paced by turnover in existing staff and the exciting prospects of three externally funded, internationally known visiting Professors for 1991.

Lincoln University, the Department, and New Zealand industry will miss Professor Roger Juchau, Head of the Department, as he returned to Australia on 23 October to head up and build a new and exciting commerce programme at the University of Western Sydney. Faculty, students, and alumni wish Roger the very best and appreciate the great deal of effort, momentum, and direction he invested in the Department over the years. The difficult search for a new HOD is underway and an appointment will hopefully be made very soon. Adrienne Steed, the Department Secretary, co-ordinates the combined efforts of Professor John Baen, Cedric Croft and Murray Clark in directing the department, as it takes three individuals to temporarily take the place of Roger Juchau until a replacement HOD can be found.



Valuation and Property Management Staff.

Front row: Brent Nahkies, John Baen, Steve Binnie.
 Back row: Ev Moorhead, Cedric Croft.

Despina Kerdelmidis has taken a professional leave of absence for two years and will return to Greece to conduct research and gain a valuable international perspective.

Mr Brent Nahkies has been studying at Texas A&M University towards his Master's degree and should return to lecturing valuation subjects sometime in May 1991.

New staff in this growing and vibrant department include Mr Peter Seed who teaches in the area of finance; Mr Robert Ivory in the area of accounting, and Mr John McDonagh in the area of commercial property management and investment. Mr Rob Hundleby joined the department as Technical Officer and assists the faculty in research, field test, etc and is a welcome addition to the team.

Andrew Wright and John Mackintosh, our senior lecturers in

law, have resigned and will be replaced by full time teaching staff. Their contribution to Lincoln has been significant over the years and they will be missed.

The Department continues to have a very large teaching responsibility and yet continues to conduct research and publish in major international academic and professional journals. Faculty are generally active in the New Zealand and international professional groups they represent and are encouraged to present papers on contemporary research topics in areas of specialisation. During 1990 over 70 presentations were delivered by various faculty to professional groups and accounting conferences outside Canterbury. Reaching out to professional groups beyond Canterbury will continue to be a major objective and important part of our faculty's academic activities.

Industry funded research and student scholarships continue to be an important growth area for the department. Substantial funding support was obtained during 1990 from Trust Bank Canterbury (visiting Professorship), Valuation New Zealand (student scholarship - Bruce Brown Award), and The Real Estate, Valuation, and Property Management

Education Foundation (three-year Professorship support).

As funding for staffing has been extremely limited these partners in education have allowed Lincoln to acquire better faculty and students in a very competitive market which otherwise would not be possible.

During 3 - 5 December 1990 the first ever Conference of Property Related Academics was held at Lincoln with corporate sponsorship including the three property institutes, United Realty, and Valuation New Zealand. Approximately 42 professional papers were presented by delegates from all over New Zealand, Australia, Singapore, Fiji, Hong Kong, America, Britain, Scotland, and South Africa. A need has been met, a precedent has been set and should be repeated annually in New Zealand and/or Australia hereafter.

Roger Juchau continued the very successful Treasury Management Programme through the New Zealand Institute of Management and has graciously agreed to return to New Zealand in July 1991 to continue with this fantastically successful programme that the professional community has come to rely on and look forward to annually.

All staff members participate in various academic and professional conferences and continue to spread

the word about the level of excellence in teaching and research at Lincoln.

Alumni are always welcome to visit the department and many have offered to visit with students about their professional activities and careers, both in and out of the classroom environment. Students are extremely interested in Lincoln Graduates who come back and share their lives with them.

Our accounting, finance and property students continue to be a very competitive and employable group of young people who seem to be doing very well in the harsh job market of 1990-91. The financial and moral support of our former students is an important ingredient in our greatest asset - Lincoln Graduates - the proof is always in the pudding.

LANDSCAPE ARCHITECTURE

Light in the Dark, Queenstown Renaissance and Taumutu Marae are just three of the community projects we have been involved in this year. All landscape architecture studio design projects at Lincoln are based on 'real' sites, and many of them have 'real' clients - schools, community groups etc. Over the course of a year, this means that both staff and students make a significant number of community contacts and contributions.

Early in the year the Landscape Architecture Section hosted sixty Australian landscape students who spent three weeks in New Zealand. For part of this, they joined some of our BLA students on a field tour to Queenstown. When they returned to Lincoln, the combined group designed ten project sites in and

presentation drawings that are now being displayed by the local Council.

In July all the students and staff in the Section created 'Light in the Dark' in Cranmer Square Christchurch, complete with music, as part of the Christchurch Winter Festival and University launch week. Other recent studios have included projects as varied as a redesign of Weedons Cemetery (presented to the cemetery committee), a remodelling of the Provincial Building courtyards (presented to the Regional Council), and the design and construction of a play area for the Hoon Hay community creche (an exercise in both project management and practical implementation!)

We hosted Alan Titchener, vice president of the NZILA, as visiting lecturer. As well as organising a series of staff and student seminars on the relationship between the profession of landscape architecture and the Treaty of Waitangi, Alan facilitated two projects that involved students in design work at our local marae, Taumutu.

Individual staff all continue with their personal contributions to the University and Community. Graham Densem has presented a discussion document on Campus Development; Val Kirby has been involved in the university launch celebrations, and has a continuing commitment to landscape development at Kaiapohia pa site; Mike Barthelmeh continues to expand our micro-computer facilities - this received very favourable comment from our Australian visitors; Lisa Gelfand has been the primary organiser of many of our community projects; Maurice Angelo exhibits his paintings regularly, and Jule Einhorn combines her part time teaching with a similar

position at the School of Fine Art, Ilam. As Head of Section, Simon Swaffield is heavily involved in co-ordination of our complex teaching programme, and has a major personal research project investigating aspects of professional communication in resource management nearing completion.

There were no staff changes in 1990 (this must be a record!) and most of our creative energies were directed towards the phased introduction of the BLA.

Next year we will have six separate streams, each with studios running continuously in addition to lectures and practice subjects. The MLA has also been revised, and is now available as a one year examination-only or thesis-only programme for suitable candidates. This will be our next area for development, as part of an overall focus on upgrading our research programme.

HORTICULTURE

The department is considering establishing a sub-station in Holland! No not really, but 1990 will be remembered as the year when it seemed that almost half the staff were stationed in that country.

Anna Veltman resigned to take up a study scholarship awarded by the Dutch Government. She is doing a masterate in Wageningen.

Mandy (Horticultural Management) and Shaha (Lincoln Springs) Shaharudin are at Wilhelminadorp. Mandy is on sabbatical leave studying the economics of spacing systems for apples. Dennis Farr is on sabbatical studying flower production at Wageningen.

Richard Rowe and Graham Thiele met up with both Mandy and Dennis at the International Hort. Congress in Florence and Bob Crowder wasn't far away visiting Hungary as a board member of IFOAM (International Federation of Organic Agricultural Movements).

Mike Morley-Bunker returned in June 1990 looking slightly tanned from 9 months in Queensland. He studied fruit production in the warmer subtropical fruit-growing climates from both a scientific and a sensory angle. The science data needs analysis and the sensory experience could do with repetition, he said.

Not new, but now looking good is the development of the Amenity Husbandry Demonstration Block at the Horticultural Research Area. This is being used as a teaching area to help students in the Diploma of Parks and Garden Technology develop basic skills. It contains annuals, perennials, trees and shrubs which will become a useful resource for the university. A substantial collection of nearly 60 different species, hybrids and cultivars of Magnolias has recently been planted in this block, along with a collection of New Zealand native plants and representatives of each of the families belonging to the Gymnospermae. A pond has also been established and planted by Diploma in Parks and Garden Technology students this year.

Development is being carried out by Pamela Gibbons and Roy Edwards with help from the Hort Research Area staff - particularly Keith McIntosh.

The face of the nursery is changing - new bitumen paths have replaced the

old shingle ones and a new bin area is being constructed. Two new glasshouses are to be erected in the near future.

The Department was very upset at the demise of the formal garden and the loss of many excellent specimen plants to make way for this lecture block. At least a collection of magnolia specimens has been re-established in the Parks and Garden Section in the Horticultural Research Area.

Leigh Harrison joined our department in April replacing Kathryn Macfarlane as secretary for the academic year.

Jill Pease joined us for the academic year to act as tutor for the post-graduate degrees in viticulture and oenology. Her presence enabled us to increase the intake for the course in 1990 over and above that in 1989. Jill was a graduate from the class of 1989.

Still with wine - David Jackson and Aldo Fautrier (Plant Science) took a study tour to France in May 1990. The participants (and the tour leaders) were so struck by France that they will be repeating the tour in 1991.

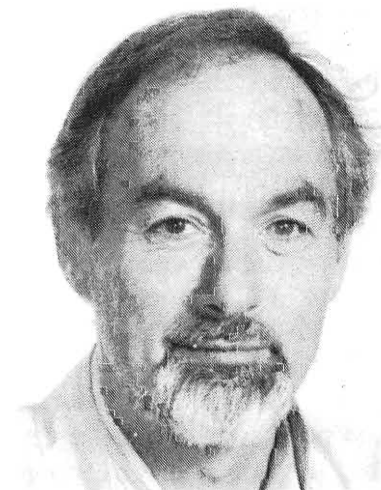
Despite notes from Council that horticultural student numbers have declined, the reverse is the case. In 1990, numbers taking horticultural courses were 3.8% up for Diplomas compared with 1989. There was also a large influx in post-graduate diploma enrolments which were 52% higher. It is difficult to identify clearly undergraduate degree numbers but individual class numbers indicate a slight reduction for B.Hort.Sc. more than compensated

for by an increase in B.Com. students taking horticultural subjects.

Hamish Kelland, temporary tutor in Hort Management was responsible for a contracted short course for Pakistani and Bhutanese government employees over the 1989 - 90 summer. This was a first for the Department and its success could herald more of its type. Unfortunately Hamish's three year temporary tutorial position was terminated in November 1990.

During the year the University instituted special awards for excellence in research or teaching. Congratulations to David Jackson for gaining one of the research awards for his work with grapes.

Almost every year the Department has the privilege of hosting academics from overseas. For most of this year Dr Norman Looney has been with us from Canada. His specialty is in



Dr David Jackson

growth regulators for tree fruits and notably he is an authority on Alar.

Professor Rowe has been involved in consultancy work in vineyards in the

Napa Valley of California and has been over to the United States several times during 1990 in connection with this work.

It might seem like taking coals to Newcastle but his basic research into using root growth control to control plant vigour is being put to good use in devising methods for controlling the extreme vigour of vines in some of the Napa Valley soils.

Professor Rowe has also been very involved with the Canterbury 'Going for Goals' organisation. He is a member of the primary production section and has had a major role in developing the goal of making Canterbury the leading Agri-business centre in New Zealand. He has been pointing out the potential economic gains for the Canterbury region of using irrigation to intensify and diversify land use in the region.

Since Rupert Tipples' book on Alfred Buxton, Colonial Landscape Gardener, was published at the end of 1989 he has been in considerable demand as a public speaker. Following an address to the Canterbury Branch of the Historic Places Trust in June there was an invitation to speak to the Christchurch Vintage Home Restorers Group and then the Landscape Contractors Guild in August. In October the address to the Historic Places Trust was followed by a whole day field tour around many local Buxton gardens. Besides this non traditional activity Rupert has also been Branch President for the Association of University Teachers of New Zealand for Lincoln University, which has entailed regular trips to Wellington.

EDUCATION UNIT

1990 has been a year of growth and change for Lincoln. So also has it been for the Education Unit. Some of us feel we are the most "shifted" group within the institution. The Continuing Education section moved yet again. This time to a location within the George Forbes Memorial building.

But we have shifted in other ways too. Don Crabb now has Errol Costello, Betty Shore and Louise Deans all employed on a part-time basis to help run a busy programme of professionally managed conferences, workshops, training programmes and field days. Jim Malcolm helps out with tour groups and specific events on a casual basis. This year we have again run programmes in various locations in both islands as well as at Lincoln. Courses for the more elderly and for the development of rural women feature strongly in our activities.

Students now leave Lincoln much better equipped with skills in a range of presentation methods. The Educational Services section has managed to hold the same staffing as we had with 1,000 less students and much less demand for audio visual, graphic and photographic teaching and back-up facilities. Peter Gatehouse, Dianne Lenz, David Hollander, Kaye Barker and Gayna Vetter form a very stable experienced team well equipped to provide the increasing range of services required in a busy university.

Government-imposed changes on Lincoln have demanded a new accountability for performance at all levels. This has led to a much stronger programme in staff development and appraisal being

developed. Neil Fleming has been at the forefront of this and has been a catalyst to keep pressure on both administration and teaching staff to accept and implement a systematic programme. One example of the success of this effort has been the 80 teaching staff who in the second semester sought information about their teaching effectiveness through formal student evaluations conducted by the Education Unit. Nicola Cameron provides the administrative back-up for this work as well as joining Erin Jennings in a very busy work load of word processing and office management. Our two secretaries seem to us to work longer and harder than do most at Lincoln.

Graham Tate continues to provide overall direction to the Unit and takes most of the responsibility for organising the Unit's internal formal teaching. In 1990 we examined and taught five subjects in rural development and extension, communication and continuing and community education. With this, plus postgraduate teaching, plus being heavily involved in an overseas training programme for Bhutanese and Pakastani visitors, plus spending a month consulting for MERT in education development in the South Pacific, it has been an eventful year. Perhaps it is not surprising that there has been a noticeable thinning and greying in the hairlines of many Education Unit staff.

In the 1970's many of the existing functions were provided through the Rural Development and Extension Centre. In the 1980's we reorganised with emphasis on linking for learning through the Education Unit. Without doubt, the 1990's will see further administrative reorganisation within our grouping. However, the foundation of enhanced professional

skills for a wide clientele, now provided by our activities, must continue to be a strong feature of Lincoln University's further growth.

PLANT SCIENCE

Perhaps the most notable achievements in 1990 have been by younger members of the Department. Grant Edwards who is completing a B.Ag.Sc. (Honours) in Pastoral Science has been awarded a Rhodes Scholarship which will enable him to complete a D.Phil. degree at Oxford University. Grant is the recipient of the first Rhodes Scholarship while a student at Lincoln University. In addition to his excellent academic achievements he is currently a member of the New Zealand Hockey Development Squad. Rosalind Buick completed her Ph.D. in Weed Science and was the first student to be eligible to graduate from the newly constituted Lincoln University. She is presently undertaking postdoctoral studies at Virginia Polytechnic and State University in Blacksburg, U.S.A.

The University introduced two awards for Excellence in Teaching in 1990. Dr Warwick Scott was a recipient, which was just recognition for his excellent and unique teaching style.

The past year has seen the departure of several overseas students. In recent years the Department has had a strong connection with Bhutan but the return of Pema Gyamtsho and Kinzang Wangdi after completing Masters Degrees reduces the direct association at this point. Lee Seong Hee has returned to Korea, Husnan Effendi to Indonesia, and Hadera Gebru to Ethiopia. The departure of these students has not been matched

by a similar number of arrivals. This is in part a response to the introduction of high fees for overseas postgraduate students. However, the Department is pleased to welcome Kandeh Turay from Sierra Leone and Kaniappa Reddy from Fiji who are both studying for Masters Degrees.

The staff have made significant contributions to overseas conferences with Dr Gavin Daly attending the Ecological Congress in Japan, Mr George Hill attending The VIth International Lupin Conference in Chile, while Dr Bruce McKenzie and Professor Roger Field both attended meetings in Australia. Perhaps the most 'physically demanding' overseas visit was by Dr Aldo Fautrier who teamed up with Dr David Jackson from Horticulture to act as couriers for New Zealand Wine Producers visiting French vineyards.



Dr Warwick Scott

Their return was marked by a discussion on the quality of the science associated with French winemaking and the acquisition of expensive tastes in wine! At present Dr David McNeil is working in Canberra with C.S.I.R.O. and is developing new expertise in plant biotechnology. He is due to return

in mid 1991 and should provide a focus for the Department's development of molecular biology approaches to plant breeding. Dr Jonathan Palmer who joined the staff in 1989 has been in demand as an ecological consultant and has made two visits to Indonesia during the year to assist in the production of environmental impact reports on the development of geothermal power sources. These assignments have been arranged through Lincoln International.

By mid-year Sandy Hines had returned from almost 12 months absence overseas to resume her duties as a technician in Agronomy. Helen Searle has just departed on parental leave with the baby due at the time of going to press. She will be temporarily replaced by Sue Thompson who is currently completing her Honours project for B.Hort.Sc. (Hons) in the Department. We have recently farewelled Amanda Warr who had provided a major input into the Department's biotechnology programme. She has been appointed as a scientist by New Zealand Forest Products located at the Forest Research Institute in Rotorua. Bernadette Calder has been the Departmental Secretary for 13 years and a very important and recognisable face in the Department. The Department's other secretary, Judy Rennie, departed during the year and has been replaced by Judy Lamberts. Three staff have completed 20 years service during the last year: Dr Warwick Scott, Mr Alex Jones and Professor Roger Field.

One of the notable achievements in the early part of the year was the publication of "Pastures" edited by Professor R.H.M. Langer. Many staff in the Department have contributed

to chapters in this book which is a completely revised version of the original "Pasture and Pasture Plants" published in the early 1970's. There is definitely a consensus within the Department that this book is essential reading (and purchase) for those interested in pastoral agriculture.

There has been some adjustment to responsibilities within the Department and the University as a whole. Professor Jim White has become Chairman of the Standing Committee of Professorial Board and in addition is involved in the Academic Policy Committee and the Principal's Management Advisory Committee. Professor Roger Field took over as Head of Department at the beginning of 1990. He has recently been appointed to the New Zealand Vice Chancellors' Committee on University Academic Programmes.

Staff continue to be busy in contributing to the running of professional societies. Dr Aldo Fautrier is on the executive of the New Zealand Genetical Society, Dr Gavin Daly has a similar position with the Ecological Society, and Dr Bruce McKenzie is secretary of Agronomy Society. In addition, Michael Smetham has recently been involved in the organising committee for the Grasslands Conference which was held in Ashburton. The latter meeting had a lot of local interest and several visitors to the Department from the North Island, notably a group of over 20 from the Agronomy Department at Massey University. The Department was pleased to welcome Professor John Hodgson and some of his staff and postgraduate students.

The Department has been involved in some interesting and innovative research in the last few years. The findings of this research are published biennially in the Plant Science Review of Research which can be obtained by writing to Professor Roger Field. One notable development in the last year has been the establishment of a six hectare Agroforestry block on part of the Research Farm. The Agroforestry experiment has been led by Mr Dick Lucas and Mr Michael Smetham with contributions from other staff in the Department and Dr Don Mead from the School of Forestry, University of Canterbury. The development is notable because of the emphasis being placed on the interaction of trees within pastures in the seasonally stressed environment of Canterbury. Six pasture swards are being evaluated. One other area of Departmental research that has been in the public eye is Dr David McNeil's programme on intensive fruit and nut production. He is exploring the potential of ultra high density populations to hasten and enhance production.

PARKS, RECREATION AND TOURISM

The first group of students from the Bachelor of Parks and Recreation Management will graduate in May 1991. The Master of Parks and Recreation Management and the Postgraduate Diploma in Parks, Recreation and Tourism were introduced in 1990. Presently there are 18 postgraduate students enrolled in postgraduate programmes in the Department. The Department is fortunate to have a number of overseas under-graduate and post-graduate students, particularly from Nepal. The Bachelor of Parks and Recreation Management (Honours)

students will be selected for the first time for the 1991 academic year.

During the past year further staff joined the Department to accommodate the increase in students enrolled at both the under-graduate and post-graduate levels. Ms Pip Lynch was appointed as a lecturer. Pip has extensive experience in outdoor pursuits and as an outdoor educator in New Zealand, Canada and the U.S.A. She will be responsible for developing and teaching outdoor and environmental education at Lincoln and will be involved in related areas. Robin Curtis joined the Department as a tutor in Maori Studies. He is from the Ngati Pikiao hapu of Te Arawa, Rotoiti. Robbie teaches into both Aotearoa/New Zealand Society and Maori Culture and Society in the Bachelor of Parks and Recreation Management. Peter Smith is the 1990 Lincoln University Visiting Teaching Fellow. Peter is Head of Biology at Lincoln High School and is developing teaching resources in the broad area of environmental education. In light of this he has developed a "user friendly" database computer programme called "Teacher Aide" which is designed for use by teachers and other educators. Peter has also been involved in teaching and tutoring in several subjects within the Bachelor of Parks and Recreation Management.

As student numbers increase so does the workload on secretarial staff within the Department. Jane Marriner has been employed on a part time basis to assist Pauline Patterson with the secretarial requirements within the Dept. Jane was formally secretary to the Academic Secretary Christchurch School of Medicine and has prior experience at Lincoln as a typist in

the Agricultural Economics Research Unit. Most recently, Jeanette King was appointed as a technician to the Department. Jeanette has a B. For. Sc. (Cant.) and is responsible for the Departments Resource Centre, and Arts and Environmental Interpretation Labs, as well as helping with teaching and related research programmes.

In addition to these new appointments, during the early part of the 1990 year the Department hosted Mr Jai Mehta a staff member from the Institute of Forestry, Pokhara (Tribhuvan University of Nepal) and Mr Gabriel Bani from Vanuatu, the 1990 Sir Paul Reeves Scholar. Towards the end of 1990 the Department hosted Dr George Nogradi from Brock University (Canada). George is an associate professor in the Recreation and Leisure Studies Department at Brock University; in addition he directs his own management and human relations firm.

The Dept of Parks, Recreation and Tourism in conjunction with the Hillary Commission for Recreation and Sport is compiling a comprehensive New Zealand Research Register on leisure and recreation to be published in 1992. The register will be a listing of New Zealand research, both completed and in progress from 1972 onwards. It will also include significant research completed prior to that date.

In 1990 Clare Simpson published a kit-set on girls and physical activity, called 'Girls on the Go'. This will be piloted in Christchurch Schools in 1991, with a view to distributing the kit nationally.

Current research interests of staff have continued during 1990, including a major involvement by Grant Cushman in the Life in New Zealand survey.

Conferences, both national and international have been well supported by Parks, Recreation and Tourism staff. Notable in this area has been staff involvement led by Rick Mansell when Lincoln hosted the middle day of the New Zealand Institute of Parks and Recreation conference. A major innovation for Lincoln University in 1990 was the hosting of the first Conference of the Sociological Association of Aotearoa (New Zealand). Bob Gidlow played a major role in the organisation of this conference.



Dr Grant Cushman

UNION AND HALLS

For staff of the Union and Halls 1990 has been a particularly good year with extensive use being made of the services and activities on offer to students, staff, residents and conference and function clients.

In line with our objective of providing a quality living

environment for residential students we have continued to develop and expand the Halls Community Programme to meet the needs and expectations of residents. The programme on offer this year included a video evenings, a formal Halls dinner and Ball, inter-Hall sports competitions (e.g. volleyball, indoor cricket and touch 7's) study skills workshops, an academic tutoring service, a ski trip, individual Halls activities such as steins, pancake and dessert evenings, Halls photos and some interesting but seemingly Halls T-Shirts were again produced this year. This programme of activities meant that residents were in the fortunate position of choosing 3-6 activities to be involved in each week. Of particular note has been the development of residential committees in each Hall. These committees serve both as a medium for residents to organise activities for their Hall but also as a link between the residents and Halls management. It is encouraging to see how the committees have developed since their establishment in 1989.

There is little doubt that the Halls' community programme has made a big impact on the residential environment. The annual Halls survey (held since 1988) this year showed that 90% of the residents enjoy living in the Halls. Much of this positive perception by residents can be attributed to the programme.

It is also worth noting that the behaviour of residents has improved markedly in recent years and it is no coincidence that this has occurred as the programme has grown and expanded. Indeed, whereas five years ago, poor behaviour and student discipline had a high profile in the Halls, it is now the services and activities on offer that take centre

stage with student discipline having a far lower profile and episodes of serious unacceptable behaviour now few in number.

The Catering operation has continued to develop as every effort has been made to meet the needs of customers. The "Fresh and Tasty" salad bar in the cafe has continued to be popular along with the new lunchtime bistro meal service in the Dining Hall. In addition, the cafeteria was awarded a New Zealand Heart Foundation "Heart Beat Award" in December for meeting Heart Foundation criteria for work place cafeterias, which take account of the types of food on offer and their presentation.

The Conference and Function Centre has handled over 60 groups with approximately 12,000 bednights of conference guests this year. In addition, many weddings, socials and dinners for outside groups have been held throughout the last 12 months. These functions have been for as few as 10 persons and in three cases for as many as 500 people. Results from 12 months of conference questionnaires indicate that conference guests are very pleased with the services and facilities on offer and leave the campus with a favourable impression of Lincoln University.

This favourable perception of Lincoln is assisting the University hold its own in the conference and functions market despite the industry being somewhat depressed.

Credit for the good performance of the Union and Halls in 1990 goes to our staff who work hard to provide good quality services for students, staff and conference guests.

AGRICULTURAL ENGINEERING INSTITUTE

The year 1990 marks a watershed in the history of the Agricultural Engineering Institute (AEI). Public funding ceased on June 30th and was replaced by a research contract system administered by the Foundation for Research Science and Technology (FRST). AEI has since been successful with bids totalling \$1.64 million. FRST project work areas include:

- Management information systems and control technology for natural resource and primary industry management.
- Quality enhancement and export acceptance of primary industry products.
- Tissue culture automation.
- Establishment of new plant cultivars for pastures.

AEI derives significant funding from other sources: Regional Councils, Producer Boards, and consulting activities, mainly in the waste management field. Additionally, AEI's product base continues to expand. Computer aided design programmes for irrigation systems, a soil moisture monitor, and a combination bale tool are receiving a promising market response.

Changes to AEI's internal structure are currently being initiated to better orientate the organisation to the new funding regime. Three groups - Research and Development, Consulting, and Product Development - have been commissioned. Three new management positions to lead these groups have been advertised. Other staff levels remain stable.

In its 27th year, AEI looks forward to an exciting period of increased growth and development.

CENTRE FOR RESOURCE MANAGEMENT

The teaching programme at the Centre this year was successfully undertaken by a reduced team of teaching staff. Dr Angus MacIntyre returned to California to pursue his career in public policy analysis and Dr Basil Sharp took up a teaching position with the Department of Economics at the University of Auckland. Jenny Steven provided much needed support during the academic year and Geoff Kerr (a member of the Centre's research team) stepped in to lecture Basil's course on Resource Economics.

In all, we had 14 first-years undertaking the M.Sc. in Resource Management, the Diploma in Natural Resources or the M.Appl.Sc., and 22 continuing students. A landmark for the Centre was the completion of Reinhard Pauls Ph.D. thesis, 'Values and collective decisions: a multi-disciplinary perspective'.

The teaching load will be shared next year by some recently appointed lecturers. Geoff Kerr has been appointed to the teaching programme and will continue to lecture in the area of resource economics. Appointments in the area of public policy analysis are currently being confirmed.

Research activities continued in 1990 with two major 'clients'. We continued to receive some funding from the Ministry for the Environment and, after delivering various reports and publications to them at the end of June to satisfy our

1989/90 commitments, the research team launched into the next round of research projects. This year topics include: risk communication, applying economic instruments to environmental problems, bicultural mediation, Tikanga Maori, the implications of sustainable management for the energy industry and energy policies, sustainable land use, depletion policies, natural resource accounting and environmental quality monitoring.

Following the adoption of a new corporate look for CRM incorporating our new logo, we successfully bid and received funding from the newly established Science Foundation for the 1990/91 financial year. This has enabled us to explore some research themes underway within the Centre in more depth. Particular projects include: risk perception, option value, integrated environmental monitoring at the regional level, science and the use of natural resources and further Tikanga Maori investigations.

Over the past 12 months we have been fortunate to host two Fulbright Visitors. The first to arrive at CRM was Dr John Braden, a Professor of agricultural economics at the University of Illinois in Urbana-Champaign. John worked on policy options for soil conservation in New Zealand and collaborated with Peter Ackroyd - a member of our research team. Dr Robert Bartlett arrived at the Centre from Purdue University in West Lafayette, Indiana, in May 1990 and has spent much time with both students and staff educating us to the intricacies of the area of public policy analysis. Bob has pursued his interest in environmental impact assessment whilst in New Zealand.

A strategic management session was undertaken by the research and teaching teams in October to help us plan our co-ordinated approach to the funding opportunities that exist in the coming years. The exercise was a very useful one and has helped us focus on various activities we wish to pursue in the coming months as we enter the next round of bidding for funding.

On the organisational front, numbers of CRM staff on the Lincoln campus seem set to be boosted before the end of 1990. Co-operative links will still exist between Lincoln and the University of Canterbury in the teaching area but staff are to be located at the Lincoln campus. We look forward to the year ahead as a closer team - both in proximity and vision!

ENTOMOLOGY

As for the University, 1990 has been a momentous year for the Entomology Department. Whilst joining in the celebrations for the University's new found status, we have been celebrating our coming of age with the 21st Birthday of New Zealand's only university Entomology Department.

The main events were held in conjunction with the 39th Annual Conference of the New Zealand Entomological Society which was hosted by the Department. The conference included an all day symposium on the present state of Applied Entomology in New Zealand at which all the participants were old students of the department and its fore runner the Department of Agricultural Zoology. The quality of the papers presented is a tribute to the pre-eminence of the Department

in Applied Entomology training. The papers presented at the symposium are being published as a Bulletin of the New Zealand Entomological Society.

Prior to the conference, efforts were made to trace all former students and staff of the Department and a booklet detailing their current situations and careers was produced. It was great to see so many familiar faces at the conference and celebratory dinner. At the dinner Roy Harrison, the Foundation Professor of Entomology was made a Fellow of the New Zealand and Entomological Society, mainly for services to entomological education. He is only the second person to be honoured by becoming a Fellow of the Society.

We apologise if these notes seem as much about the Entomological Society as about the Department of Entomology, but the history of the two have been very closely linked over the years and still remain so with Eric Scott the Society's treasurer and editor of the Bulletin previously mentioned.

On a more personal note Professor Penman has been on refresher leave in North America since May and is not expected back until January. He has been based at the Tree Fruit Research Centre at Washington State University and at Simon Fraser University in British Columbia. At both places he has been assessing Pest Management Programmes.

Bronwyn Hamilton joined the Department as Secretary in November 1989. She rapidly became proficient with our quirky MASS11 word processing package and no sooner had she mastered that than

the University switched to WordPerfect.

Two of our technicians, Carol Muir and Marnie Barrell have each taken a years parental leave and Carol now has a baby daughter. We extend our best wishes to all of them. We also welcome Cor Vink to the Department in Carol's absence.

Over the last few years the Department has become even more international than usual. We currently have graduate students from seven overseas countries as well as New Zealand. The range of graduate student research topics remains as wide as ever with different students looking at population dynamics and biology of Argentine stem weevil (again!), iso-enzymes as indicators of relationship of ground beetles, toxicology and sub-lethal effects of acaricides, life histories of weed biological control agents, insects in organic orchards, thrips as vectors of fungi and interactions of humans and kea.

We plan to close the years 21st celebrations with a Departmental insect collecting trip to Stewart Island in January 1991. This will in fact be 22 years after the Department's first large scale collecting trip, also to Stewart Island. It is largely due to these collecting trips, for which the Department has achieved a certain notoriety, that the Department's Entomological Museum is now recognised as having one of the finest and most comprehensive collections of New Zealand insects, native and introduced in the world. This represents a resource of immense value.

FARM MANAGEMENT

There have been a number of staff comings and goings in Farm Management this year. Peter Gaul is still on secondment at the Fiji College of Agriculture and will be returning at the beginning of next year to be replaced by Peter McCrea. Early this year, Bill Lee who had been Peter Gaul's replacement in the department suddenly developed a very busy schedule of international visits on behalf of the Wool Board of which he is a director. Although we found it slightly hard to understand why he should prefer to visit places like New York and London rather than teach Ag Com II at Lincoln, we nevertheless wished him well and were pleased to be able to secure the services of Mike Adamson, a consultant in Ashburton, to teach the rest of the year.

Stew Pittaway has visited Fiji on several occasions during the year, both in connection with the FCA project and on other contracts. John Lay spent two weeks at FCA in January to complete the staff training course he started there at the end of last year. Neil Gow spent three weeks in Pakistan on an exploratory sortie for Lincoln International and ten days in Western Samoa helping to review the curriculum at Alafua. Sandra Martin got to go home for a few days to present a paper at the Australian Agricultural Economics Society conference in Brisbane and Elizabeth Burt took a trip at the end of the year to Latin America to present a poster paper at the International Lupin Conference in Chile. Peter Nuthall attended a conference in Germany in the middle of the year on decision support systems in agriculture and shortly after Gerald Frengley arrived back from a very productive sabbatical at

the University of California Davis and Edinburgh University. He plunged straight into teaching what remained of the new first year BCM elective so that even the Prof (who had taught the first half) could get away for a while. Tony Bywater was one of the first graduates of the agricultural systems programme introduced at Reading University by Prof Colin Spedding and was delighted to be asked to present a paper at a seminar in Reading marking Spedding's retirement in September. On the way home he called in to Fiji just to see for himself what all the rest of the staff get up to at FCA - and was quite impressed.

After two years of recruiting, Oscar Cacho arrived from the States in June to take up a two year UGC postdoctoral fellowship. Oscar hails from Mexico via Alabama where he met Gudrun from Germany; both are slowly coming to grips with New Zealand, and Oscar in particular is learning all about pastoral livestock systems as they ought to be.

Last and with considerable regret, we say farewell to Andrew Wright who for the last eight years has been primarily responsible for the development and teaching of Law at Lincoln. Andrew has made a very significant contribution to the department and the University as a whole, for which we are most grateful. Due to a change in personal circumstances, Andrew resigned at the end of the year; we wish him the very best for the future. On the research front, the year started with a number of staff involved in various risk management projects funded by MAF. These have led to a number of reports which will appear over the next year or so in publications of one sort or another.

Neil Gow presented a paper at a Farmer Seminar held at Lincoln in July based on some of this work and Sandra Martin gave another at the New Zealand branch Agricultural Economics Society conference in Blenheim. Farm business strategy formulation continues to be a topic of some interest and was the subject of papers presented in Brisbane and Blenheim. The latter was work undertaken by Prakash Narayan for his masters thesis which he completed this year before joining MAF policy services. We continue to plug away on various aspects of information and decision support systems in agriculture - which was the reason for Peter Nuthall's visit to Germany. Our level of activity in analysing various farming systems and production strategies have taken a lift with Oscar Cacho's arrival and has led to papers at the NZIAS conference in August given by Oscar, and one to the Grasslands conference in November, given by Tony Bywater.

The teaching programme saw the introduction of two new papers for the BCM degree this year and a consolidation of changes made last year, particularly in diploma subjects. Our new BCM papers are for first and third year students which, with our existing Farm Systems paper, gives us one agricultural paper at each level in the new degree. The new papers attracted a lot of interest and we hope the whole package will provide the new breed of commerce students with an interesting and informative excursion into the agricultural sector.

This should be the last year (for the moment) that Farm Management degree student numbers fall as we should start to see last years slight increase in first year numbers coming through in the BComAg and the

following year in the BAgSc. It will be a year or two though before we can provide our traditional employers with the number of graduates they would like to have from which to choose their new recruits. There was a slight drop in first year diploma numbers but indications are that first year intake will be up again next year. From our perspective, the new diploma programme goes from strength to strength.

As in the previous two years, there has been another large increase in commerce student numbers which put further strain on the law teaching unit. During the year the whole law curriculum has been revised and a number of new and reformulated papers have been approved for introduction over the next three years. However, how we will manage to implement these changes without Andrew Wright is a matter of some concern.

NATURAL RESOURCES ENGINEERING

Professional engineering can be described as the use of technology and/or science enabling humans to have some degree of control over their destiny to the physical world. This may be the application of electronics for the advancement of human health, the design of multi-storey buildings to withstand earthquakes or the design and installation of an irrigation system to maximise production at minimum cost.

New Zealand's primary assets have always been and will continue to be its natural resources, whether it be for agricultural, horticultural or forest production or for their cultural, environmental and aesthetic

values for recreation, tourism and quality of life.

Natural Resources Engineering has a vital role to play in the development, restoration and conservation of our natural resources. The Department of Natural Resources Engineering (D.N.R.E.) aims to facilitate the wise and sustainable use of natural resources - land, water, air, sun, plants, animals, people - by the application of science and technology.

The D.N.R.E. works to fulfill the mission through education, research, extension and consulting.

Education at a tertiary level is the primary task of the D.N.R.E. The professional engineering degree, Bachelor of Engineering (Natural Resources), B.E.(Nat.Res.), is offered in co-operation with the Faculty of Engineering, University of Canterbury. It is a four-year degree, some of which is done at Canterbury, or maybe Auckland Engineering School, while the rest of the course is completed at Lincoln. Prior to 1990 the degree was known as the B.E. (Agric.).

In 1991 the B.E.(Forestry) is to be offered jointly by the School of Engineering and the School of Forestry, with the D.N.R.E. having a significant input. This degree recognises that New Zealand forestry is entering a new phase of expansion with current wood production expected to double in the next 10 to 15 years.

The D.N.R.E. continues to offer a good range of options for postgraduate studies and 1990 saw the launching of a new M.E.(Nat.Res.) in Environmental Factors in Engineering. This is a

design-module-based degree of particular benefit to practising engineers who wish to upgrade their understanding of cultural, ethical and other environmental impacts of engineering, while refreshing their professional engineering skills in an academic environment. Tim Davies has been the primary instigator of this degree.

Postgraduate activity over the last two years has seen two Ph.D.'s completed by Hamish Cresswell and Bill Young, with Jagath Ekanayake, Keith Morrison, Stuart Larsen and Larry Bellamy (staff) continuing theirs.

Similarly a healthy number of masterates and postgraduate diplomas have been completed and the Department has certainly enjoyed the overseas students who have participated.

There have been some significant developments in the subjects offered for undergraduate diplomas. The elective, Machinery Project, enabled diplomates to design and build equipment of their own choice. Examples of projects this year were a land yacht, a log splitter, a covered dog trailer, and a sheep handler. Russ Short, the examiner for this subject, commented that it involved a lot of work for both staff and students, but also generated a great deal of enthusiasm. Another practical subject, Water Technology, was offered for the first time this year as a mastery course. The students gained practical experience with sprinklers, pumps, fertigators, irrigation controllers, pipes and fittings, as well as designing their own small irrigation systems. Improved teaching techniques and more appropriate options have

appealed to the undergraduate diploma students.

The Department continues to be active in research in land and water resources engineering, energy resources, meteorology and the environment and rural technology. A publications booklet listing research in the Department during the last ten years has recently been produced.

Two units within the Department have been recently set up. Neil Cherry has established the Climate Research Unit. This unit will be involved in climate and weather research, with particular relevance to Canterbury and New Zealand, will issue forecasts of short-middle- and long-range weather, will provide an advisory service to the University and the community, is to be involved in extension and consulting, and will develop technology for weather observation and data collection. The Appropriate Technology Unit was set up by Andrew Dakers with the primary aim being education, but also to establish a resource base to enable interested people to deepen their understanding of both the philosophies and technologies of A.T.

Staff movement for 1990 has involved Tim Davies in a three-week visit to China (in September) with Chris Phillips of F.R.I., to study debris flow.

Tim has also been Acting H.O.D. since David Painter took sabbatical leave in June, visiting University of Texas, University of Manitoba, University of Waterloo, and finally spending four months at the Department of Civil Engineering, University of Melbourne, and returning at the end of January 1991. Bryan Uden and Bruce McCormick (technical staff) have left, while Ken

Mulvey has joined our staff as electronics technician, with his time shared with the Works Department. Leon Blanchet has been Building Technician, and David Riley assisted with some of the practical subjects in rural and garden structures.

With our moves into environmental and forestry engineering at the professional level and the rationalising and development of the more practical undergraduate diploma subjects, the D.N.R.E. is responding well to the changing educational needs of New Zealand.

KELLOGG FARM MANAGEMENT UNIT

The ninth year of the Kellogg Farm Management Unit (KFMU) has been very successful. The number of producers attending courses and taking up computer systems developed by the Unit exceed the numbers in previous years. Very importantly, the year was financially satisfactory with all costs being met by the income from the sale of software and course fees. While greater financial success is clearly desirable to allow expansion and research, the fact that the Unit has covered its costs in both years following the final W. Kellogg Foundation grant is very pleasing.

It is also pleasing that the activities of the Unit have provided many non-computer users with training and assistance. The Unit is very much a national resource which has extended the reputation of the then Lincoln University College of Agriculture and has provided community leadership. This leadership has also extended to Australia where some one third of the systems delivered are installed. There is clearly an opportunity to

extend the role worldwide - both for supplying software and training - particularly as the marginal costs are very much less than the average costs.

The achievements of the Unit are a function of the dedicated and committed attitude of its staff. The University is fortunate in having a stable group that has built up considerable computer and educational expertise over the years. In addition to the core group, the Unit was pleased to welcome two new staff, Mrs K. Varcoe and Mr P. Campbell, as replacements for Ms J. Foster and Mr S. Teoh whose contracts had been completed during the year.

It is probably true that in the foreseeable future all producers will eventually use a computer. In that all banking, ordering and marketing will be based around computers, it will not be possible to conduct a small business without one. In some respects, the computer will replace the services provided by the telephone and mail services. As by far the majority of rural people are unfamiliar with computers there is a massive educational task ahead. The Unit continues to run introductory courses up and down the country with increasing emphasis on 'hands-on' workshops. These are consequently limited to areas with suitable computer suites. It is highly desirable to acquire a suite of portable computers to overcome this problem - fund raising efforts for this purpose have been initiated.

While most producers are yet to acquire their first computer, the numbers of actual users increases at an increasing rate. Many find the transition difficult and it is often a year or two before they feel

confident. Some never reach this point. Extending skills is another major activity of the Unit through constant phone and correspondence based interchanges, and equally as important, through advanced seminars. These were also run from Invercargill through to Hamilton and enabled users to overcome problems as well as extend their range of computer use. Co-operative groups of users also serve these functions - these groups of local users, of which six now exist in New Zealand, meet monthly with encouragement from the Unit.

In Australia, the number of Kellogg software users continues to expand. As noted, some one-third of the new users are located more particularly in South Australia and Victoria where the major distributing agent is situated. With the size of the Australian market, there is considerable room to expand the numbers involved. This, and the marketing of Kellogg Systems in the rest of the world, is a task that needs addressing.

All the major Kellogg packages continue to be enhanced, particularly the Financial Recording System (FRS) which is the major system used throughout Australasia. A new version (6.1) was released early in the year which contained many new features including an extensive on-line help facility and a modern pull-down menu access system. The enhancement process will be a constant and important task for many reasons including the need to maintain a competitive advantage. Sometimes this involves visual aspects rather than necessarily improvements that provide better management information. The Livestock Recording System also received visual improvements as well

as a major new section for obtaining progeny or ancestor calculations and reports. The Production Recording System had some minor improvements carried out and a new budgeting system was planned.

There are still many improvements for the future, and a major frustration is being able to visualise the end point without the resources to put it into effect. Another frustration is that inability to attract sufficient research funds to embark on major programmes that would more clearly lead the way. Despite the limited research, the Unit personnel are continuing to make every effort to meet the many challenges which the rapidly evolving world of 'computers in management' continually bring up. There is no doubt this is a growth sector of primary production, and one in which the Kellogg Farm Management Unit is a leading participant.

ADMINISTRATION

1990 has been a year of significant change to Lincoln University.

The Government's moves in the areas of student allowances, tuition fees, full cost recovery from overseas students and funding based on numbers of equivalent full time students have led to significant increases in workloads in the administration. At the same time student numbers have increased very substantially (more than 25% in two years) and there have been changes in the regulations for degrees and diplomas that have greatly increased flexibility and student choice. As a result the Registry has needed to upgrade, modernise and automate its administrative systems.

1990 has seen the first steps being taken towards the development of a Management Information System for the University. The majority of the information required for such a system already exists within the Registry computer systems but access to this information from outside the Registry has, in the past, been limited. It is anticipated that this will change significantly over the next two years. The development of such a system involves a large change in the manner and type of reporting available. To cope with this demand the University is currently evaluating fourth generation report writing software and hiring a new staff member.

There have been major developments to the Lincoln University campus. The James Stewart Building comprises two lecture theatres seating 330 and 220 students respectively plus a 30 seat seminar room. The complex has been joined with the Diploma Centre to form a 35 station computer laboratory and seminar room for diploma students.

The increasing student roll, particularly in the commerce area has required two additional lecture theatres to be fast tracked to provide teaching space for 150 students in each. The Commerce and Lecture Theatre Building includes a 50 seat seminar room. These theatres are connected to the first stage of a Commerce Building which could be extended as required to provide four wings of approximately 1800 sq m each. This building has three floors with designed post-graduate study area in the fourth floor attic space. This development is behind the Lodge bounding on Farm Road adjacent to the Central Store. The lecture theatres are due for completion by the end of February

1991 and the Commerce wing by May 1991.

A new block of changing rooms with showers and seating has been constructed on the west side of the Recreation Centre behind the squash courts.

Two double unit flats for married students have been constructed on Ellesmere Junction Road and an additional double unit for eight single students was provided from existing flats at the west end of Farm Road.

A multi-user chemical store has been built at the Field Service Centre to cater for pesticides, weedicides and toxic chemicals used on research farms.

The bookshop and printery renovations were completed in January 1990 and are providing excellent services for staff and students.

The increased roll has required Orchard car park to be extended by 120 parking spaces. This has been excavated and metalled and will be sealed over the 1990-91 summer vacation.

A further new development at Lincoln during 1990 was the establishment of a Community Relations Centre. The aim of the Centre is to act as a catalyst for contact and dialogue between the University and its community, and the promotion of Lincoln's identity nationally and internationally. The new Director of Community Relations, Dr Paddy Austin, intends to raise awareness in the wide community of the range of disciplines in which Lincoln offers high quality teaching and research. As well as the

Director, there are three staff who were in the University prior to the creation of the Centre. Ron Hickford, the Liaison Officer, Ormond Wilson, the Careers Adviser and the University's Journalist, Ian Collins. The establishment of the Community Relations Centre means that contact between Lincoln and its communities will now be co-ordinated and driven by clear objectives. These will be formulated in consultation with University staff and in response to carefully researched community needs. The big advantage to both the University and the public is that the Centre will provide a clearly identified mechanism for communication between Lincoln and its communities.

With Professor Roger Swift taking up the Chair in Soil Science at Reading University, UK, Professor Andrew Sykes has been appointed Pro- Vice-Chancellor for a term ending 31 December 1992.

Assistant Registrar (Secretarial) Mr Paul Shamy of the Academic Section resigned on 25 July 1990 to take up the position of Manager, Board Support Services, Canterbury Area Health Board. He has been replaced by Ms Bonnie Le Grice.

Miss Denise Hoskins will leave the University at the end of the year to travel back to Brazil.

BIOCHEMISTRY AND MICROBIOLOGY

With the retirement of Professor Mulcock, Professor Bullock was appointed HOD in March 1990. Two other staff members have left during the year, both technicians. Mrs Chiew Foan accompanied her husband to a new position in

England, and Ms Kirsty Boyd-Wilson took a full-time research position with MAFTechnology, Lincoln.

A highly successful short-course on Molecular Biology for Secondary School Teachers was held in June, organised by Dr Jonathan Hickford. Several staff participated in the weekend of lectures and laboratories for 20 senior biology teachers selected from 80 applicants throughout the South Island. This course will become an annual event.

Dr Noonan and Professor Mulcock were local organisers of the New Zealand Microbiological Society annual conference held at the University in May.

Dr Sami Damak attended the UCLA Symposium on Manipulating the Mammalian Genome in Tamarron, Colorado. In November, he was appointed as a Research Officer to continue his work with Professor Bullock on the production of transgenic sheep.

Dr Geoffrey Savage was invited to present a paper at a meeting of the International Institute of Refrigeration held at the University of Aberdeen. He spoke on colorimetric determination of fillet colour in salmon, work carried out by Nathan Bird who has now left the department for a position with Roche Industries in Auckland, and is writing up his Ph.D. thesis.

Newton Lupwayi completed his thesis with Dr Noonan on competition between strains of Rhizobium for nodulation in lucerne, and passed his Ph.D. examination in November. Other students finishing during the year were Sue Francis who handed in her Ph.D. thesis on selection for glucose tolerance in sheep

(Dr Bickerstaffe) and continues her job at MAFTechnology, Lincoln, while applying for a Harkness Fellowship, and Philip Elmer, who completed his Ph.D. with Dr Gaunt on the epidemiology of pesticide resistance in brown rot of stonefruit and accepted a position with MAFTechnology, Lincoln.

Masterates completed during the year included: Carolyn Hastie (Crichton) (M.Appl.Sc.) David Manktelow (M.Hort.Sc.), Sandra Martin (M.Agr.Sc.), and Mark Braithwaite (M.Hort.Sc., Hons Class I).

The department had seven Honours students in B.Ag.Sc. or B.Hort.Sc. this year and Andrew Escayg (Ph.D.), Sharon Bishop-Hurley (M.Appl.Sc.), Lucette Dijkstra (Ph.D.), Anthony Mitchell (Ph.D.), and Geraldine Rogers (Ph.D.) have commenced post-graduate studies. The new B.Sc. degree is seeing increases in enrolments and new subjects in microbiology and cellular biochemistry have been introduced for first-year students.

ANIMAL AND VETERINARY SCIENCES GROUP

The major change in staffing was Denis Poppi's departure at the beginning of the year, to the University of Queensland. Alex FAMILTON and Graham Barrell spent periods on study leave in Australia, USA and England. Terry Hughes had a busy year culminating in the submission of his Ph.D. thesis on grazing intake by lamb, calves and goats. Richard Parker is finishing his Ph.D. work on maternal behaviour of ewes and departs shortly for a job in forestry research. During the year Prof. Sykes was appointed Pro-Vice Chancellor of the University which

results in more of departmental administration being passed around.

Research into protein digestion and lamb growth has been continued by Diane Fraser who recently finished her two-year post-Doctoral Fellowship. This work has identified individual amino-acids that limit growth, and that the potential for lamb growth is over 370 grams per day. Takahito Kambara from Japan has recently joined the group as a post Doctoral Fellow and is working on the immune response of sheep to internal parasites. Reproductive research continued with Janine Duckworth studying testosterone levels in deer to help develop methods of manipulating the breeding season. Nicholas Ogue is working on contraception for rabbits with a view of developing a control measure and Graham Barrell is investigating melatonin in Weddell seals. He is currently collecting field samples in the Antarctic assisted by Paul Muir and Jim Suttie from MAFTech. The sheep and beef grazing units continue to provide teaching resources for feed planning, and the development by Limbo Thompson of computer based teaching packages has assisted the teaching of grazing management. Alastair Nicol has developed a combined deer and cattle unit, where once mated yearlings of both species are used to maximise meat output.

Flock-Linc has expanded under Phil Beatson's guidance and Stephen Bell's management providing an animal recording scheme for the sheep industry. Laparoscopy and ultrasound fat muscle measurement service provided by the Technical Services Unit continue to assist farmers who desire this advanced technology.

ECONOMICS AND MARKETING

1990 started with the dreadful news that Tony Rayner had died during a holiday with his family in the mountains. He had contributed so much to the leadership of the department and the direction of the University that a cloud of despair descended when the news of his death came through. However we picked ourselves up and soldiered on. The Vice Chancellor had already appointed Tony Zwart as HOD. He faced the daunting prospect of running a department with the highest student load for each lecturer within the University together with an enormous administrative load - a load which was to increase as the year progressed.

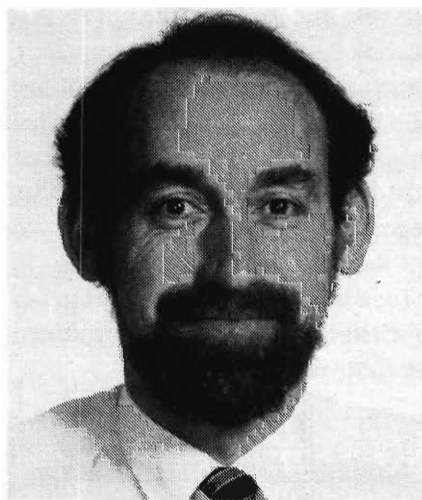
Fortunately the Centre for Resource Management had seconded Rodney Hide to us. He was able to pick up Tony Rayner's 200 level paper in Resource Economics. In the second semester we were lucky in obtaining the part-time services of Penelope Brook and John Gibson to teach Tony Rayner's 300 level paper in Economic Policy. John also managed to complete his M.Ag.Sc. with first class honours during the year.

Just before Tony Rayner died, he made three excellent appointments. Paul Dalziel joined us as a senior lecturer in Macroeconomics from the University of Canterbury, Dan Sauers came from the University of Florida as a lecturer in Business Management, and Lesley Williams, from the Otago University, was appointed as lecturer in Marketing.

Further stresses and strains befell the Department in the second semester. Fiona Willis resigned her position as a lecturer in Marketing to get into the practical end of the business with

Telecom. The Marketers were further stretched when Charlie Lamb (who was awarded one of the two University awards for excellence in teaching) joined the sick list for the second semester together with a commitment to teach three new marketing papers. Part-time lecturers Tony van der Westhuysen and David Robb stepped into the breach.

Lecturers in the Department have had to come to terms with the challenging business of teaching very large classes.



Mr Charlie Lamb

Lyn Holland taught Elements of Mathematics to 500 first year commerce students by repeating her lectures twice to two streams. Rodney Hide and Paul Dalziel shared the same task for Introductory Economics in the second semester while Ralph Lattimore and Alastair McArthur taught Economics I to 250 parks and recreation and science students in the first semester and Les Woods taught Microeconomics to a similarly large number at the 200 level.

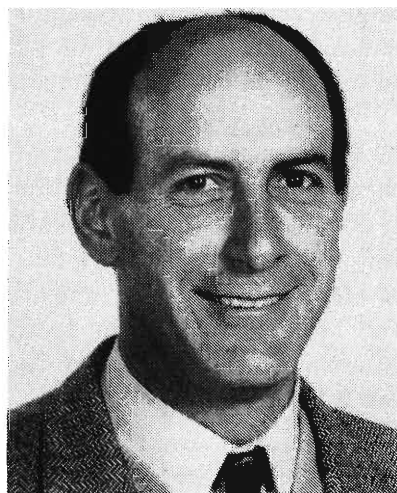
Successful lecturing to large classes requires an absolute grasp of the subject, performing skills, the wit to think up innovative ways of getting the point across, and the managerial skills to co-ordinate lectures, tutorials, tests, essays, and exams. The system is unforgiving and the prospect of blunders with loss of confidence between staff and students hangs over the lecturer's head throughout the semester.

Much of the Department's success in handling large classes is due to the efforts of our senior tutor, Mike Clemes, and his team of part-time tutors, Duncan Holland, Nick Tescos, and Azmat Gani to mention the three who did most.

We are also learning how to persuade students in large groups to actually read the reading-of-the-week and discuss it in class. Dan Sauers has introduced the 'Paper Chase Technique' from America and has applied it to large classes. The new Stewart lecture theatres also made a great contribution to the effectiveness of large group teaching where students can see and hear without distraction.

Ralph Lattimore was awarded one of the two University awards for excellence in research. Tony Zwart produced several publications on the structure of marketing organisations in New Zealand. This is a hot topic at the moment with many wondering whether the monopolistic advantages of single selling outweigh the disadvantages the absence of competition to spur efficiency. Rod St Hill was able to use his overseas leave at the Universities of Newcastle (NSW) and Strathclyde (UK) to publish in the area of post-keynesian economics. Paul Dalziel is publishing the use of post-keynesian

macro-models to connect income distribution, growth, and employment. This and other papers have led to an invitation to join the



Dr Ralph Lattimore

New Zealand Planning Council's employment working group.

Rodney Hide has published two reports on the management of fisheries under the ITQ system. He and Alastair McArthur have been critical of the concepts of sustainability and intrinsic value which are the cornerstones of the Resource Management Law Reform Bill. Alastair published a method for allowing for time using diffusion coefficients in evaluating the economic breeding value of animals and is continuing his research on applying operations research methods to animal breeding. Lyn Holland is drawing together her extensive work on the attitudes of parents to education on their children's tertiary educational choices. John Wood is carrying on with the development of the spatial theory of location decisions. Bert Ward is continuing

his econometric studies on his overseas leave in the United States.

Lesley Williams is in the process of writing up the work she did at Otago University on the attitudes of lenders to women starting businesses and on the attributes of services to which consumers are sensitive. Charlie Lamb's main project this year has been the characteristics of the market for organically grown food which is a topic badly in need of objective analysis.

Members of the department have continued to act as consultants to various individuals and organisations as part of their contribution to the extension function of the University. Lecturers played a major role in the Kellogg Rural Leadership Programme during 1990 which saw the tenth course of 24 Kellogg Scholars complete the three phases. It is interesting to record that three of the new cabinet are former Kellogg Scholars - Jenny Shipley, Denis Marshall and John Luxton.

The department was fortunate in hosting three distinguished visitors during 1990 - Dr Kevin Parton from the University of New England, Professor Richard Robinson - the Sir John Ormand Visiting Fellow - from the University of Puget Sound, and Professor Jimmy Hillman from the University of Arizona. Much was gained by both staff and students from these visitors. At the end of the year Garth Holloway joined the department as a Post Doctoral Fellow between leaving the University of Purdue and joining the Faculty at Davis, University of California. It was great to welcome home one of our former outstanding students.

WOOL SCIENCE

The Wool Science Department has had another busy year in teaching, research and extension.

With the resignation of David Cottle, who took up a position as Senior Lecturer at the University of New South Wales, the teaching load on staff members has been high. David's replacement, Peter Maher, is due to take up his position in the Department in February 1991. Peter is currently finishing his PhD at the University of New South Wales, studying production traits of the Merino and its crosses.

Peter has Bachelor degrees in both Wool and Pastoral Science and in Textile Technology so he is well suited to cover the wool field from production through to processing.

In August Pat Campbell accompanied her husband to Germany for six months, where Alastair Campbell is taking study leave. Katie Bridges has been filling in in Pat's absence.

The Certificate in Wool course was again well supported this year and John Paton a senior appraiser with the New Zealand Wool Board assisted in tutoring the students. David Strong who has assisted for many years has now bought a farm in South Canterbury and his place was taken by Bruce Blazey who we hope will assist Bruce Tinnock at least for the next few years.

The Diploma in Wool Technology course with only 13 students had a disappointingly low enrolment, no doubt a reflection of hard times in the wool industry. Wool Science subjects in the Agricultural and Commerce degree courses were well supported.

During the year, Robert Gourdie received his PhD for a thesis on 'The relationship between wool fibre intrinsic material strength variation and staple strength in a flock of Romney ewes'. Robert found that the tenacity of wool fibres, that is their strength per unit area of cross-section, is constant irrespective of whether the wool is growing fast in the summer or very slow in the winter. There are considerable differences in tenacity between sheep. This is important, as it is the tenacity of wool which is a limiting factor in terms of the rate at which it can be processed. Tenacity is low compared with many synthetic fibres. We need to look for sheep with high fibre tenacity.

Denis Maddever completed an M. Appl. Sc. degree with a thesis entitled 'Vector Space Analysis of the New Zealand Wool Board's Auction Data'. This interesting study of auction data used different mathematical techniques to analyse the clip.

The 8th International Wool Textile Research Conference was held in Christchurch in February. Department members assisted with its organisation and Don Ross presented a paper on the effect of medullation on fibre tenacity.

Hedley Sanderson in conjunction with Barry Wilkinson and Garth Carnaby (WRONZ) presented a paper on the harvesting, marketing and processing of red deer fibre. Barry Wilkinson gave a commentary on the proceedings of the Second International Symposium on Specialty Animal Fibres, held at Aachen in October last year.

The Conference was very successful and brought together over 300 wool

scientists and industry staff from around the world.

During the course of the year Lincoln University Wool Bulletin No. 2, the Wool Manual was republished and Bulletin No. 4 'Wool Yarn Manufacture' was published. They are available at the University Bookshop.

Because of heavy teaching commitments, progress on research projects has been somewhat limited this year. Nevertheless Barry Wilkinson and Fraser Aitken have continued working on various aspects of wool yellowing. A submission was made to the New Zealand Wool Board to fund a major expansion of this work. This Department has also made submissions on projects in the area of wool biology. This is a research area in which the Department was once heavily involved but one in which for the last decade few studies have been carried out in New Zealand. It is hoped that there will be a renewal of activity in studies on wool biology as our knowledge of what controls wool growth is very limited.

Department staff attended the final shearing of the Central Otago Merino Wether Trial at Matakau Station in October and returned with four wethers that are highly resistant to fleece yellowing faults and with 28 fleeces of special interest in the wool yellowing study. Trial fleece samples over all years are to be measured for fibre diameter variability to establish the relationship between fibre variability within fleeces and 'micron blow out' at older age.

The year has been another successful one for the Wool Measurement Service. Some 20,600 samples were tested in the 1989/90 season and

despite the decrease in the price paid for wool even more samples are coming in for testing this season.

The Wool Measurement Service has also measured many of the samples for the Department's research projects. It receives many compliments from sheep breeders for the quality and accuracy of its work and the helpful nature of its reports.

The Department in conjunction with the Agricultural Engineering Institute has developed a new sample scouring plant which the AEI has built. A considerable number of enquiries have been received from outside organisations about this machine since it has been in operation.

During the year a Lincoln Corer/Blender was completed by Fraser Aitken working with Dick Lowen the University's instrument technician. This machine cores clean or greasy wool samples of 20-40g to give a representative sample and then blends them ready for fibre diameter measurement by the airflow system. Already three machines made by Charleston Engineering Ltd have been sold to outside organisations.

While the department teaches wool biology, production and aspects of sheep breeding, nutrition, husbandry and management related to wool quantity and manufacturing quality, a major part of the department's teaching program is involved with post farm gate wool marketing, measurement and processing.

Wool is a raw material for the textile industry, and as over 90% of it is exported for manufacture overseas, it is important that what happens to it in New Zealand is in the best interests of its subsequent use as a raw material for manufacture.

A knowledge of wool textile technology is necessary so that the wool can be produced, prepared for sale and marketed in the most appropriate manner.

(Footnote: This report is the last one to be written by Don Ross, Professor of Wool Science and a senior member of WRONZ staff, who retires in mid 1991. It is appropriate to record here, before he departs, his huge contribution to the New Zealand wool industry.

I am sure his former students would wish to join the department staff and current students in expressing their appreciation and good wishes, albeit a little prematurely - Barry Wilkinson, HOD).

RETIREMENTS

Alan Bilbrough, former Association President and officer in charge of the University's Farm Advisory Service, retired in March 1990. He had been on the staff for 25 years.

Huntely Horn, Department of Soil Science, retired in February after 32 year's service.

Bruce Lawson, Animal and Veterinary Sciences Group, retired after 38 years on the staff.

Paul Mulcock, Professor and Head of Microbiology and Biochemistry, retired in March after 40 years on the staff.

PERSONAL CHAIRS

Alumni Association Junior Vice-President, Dr Ralph Lattimore, and Dr Kuan Goh have been honoured by Lincoln University with personal professorships in their departments.

Dr Kuan Goh of the Soil Science Department and Dr Ralph Lattimore of the Economics and Marketing Department have been given the rare appointments in recognition of outstanding contributions to research, teaching and the general promotion of their disciplines.

The main criterion for appointment is international distinction in scholarship as evidenced by published research.

Professor Goh, 55, has been on the Lincoln staff since 1971, and Professor Lattimore, 45, has been with Lincoln, since 1983.

Professor Goh is a specialist in the areas of soil fertility and fertilisers, nutrient cycling and soil chemistry.

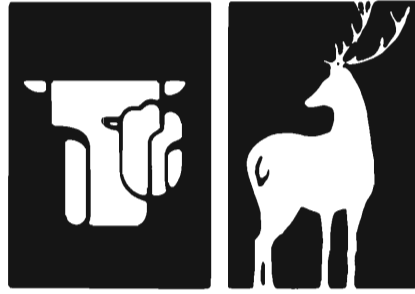
Professor Lattimore is a specialist in agricultural trade and applied policy analysis.

Both have had distinguished careers and the Association extends heartiest congratulations.

NEW PROFESSOR

Dr Grant Cushman of the Department of Parks, Recreation and Tourism has been appointed Professor in that Department. Professor Cushman joined the Lincoln staff in 1986.

Congratulations.



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REVIEW OF THE FARMS

Sheep Breeding Unit

For the last few years only three breeds have been run on the S.B.U. - Corriedales, Dorset Downs and Border Leicesters. However, since Lyndhurst was sold, the Coopworth flock has been back under Ross Wilson's control.

The Coopworth ewes have been grazed on the Ministry of Agriculture farm adjacent to the Crop Farm since July 1990. The hoggets were grazed in mid-Canterbury until September when the ram hoggets returned to the S.B.U. and the ewe hoggets were sent onto grazing out of Rangiora. With sheep all over Canterbury it was been difficult for Ross and the Animal Science technical staff to keep everything under control. Despite these difficulties they have managed to grow out excellent rams.

Sales of Dorset Downs are buoyant. Coopworth sales are also good and, now there is greater interest in lamb numbers and in heavier carcasses, the Coopworth should logically make a comeback.

Corriedales and Border Leicesters are not selling well. This is a shame because the two-tooth Corriedale rams, sired by central progeny tests rams from ten of the best Corriedale studs in New Zealand are excellent sheep.

The Animal Science Department has evidence to show the best Border Leicesters are superior terminal sires. They leave faster growing and leaner offspring than other more recognised breeds. Borders have had bad publicity because their progeny can go over-fat but by using ultrasound

techniques we have discovered there are some rams in the breed which are outstanding animals. These rams are available to farmers wanting something cheaper than the new exotics, but able to substantially increase the value of the lamb kill.

Ross continues to resow the heavy land in tall fescue and clover. The light side is performing better, also, as we get out of high endophyte ryegrass and into short rotation species, lucerne, cocksfoot and prairie grass.

Mixed Cropping

Crops were good, prices high and the farm profit for 1989-90 was most pleasing at \$113,000.

Winter wheat yielded 6.3 t/ha. Spring wheat was also good at 5.26 t/ha though one paddock, badly affected by Take-all, lowered the average. The feed barley crops of Fleet and Liberty yielded 6.3 t/ha. One dry land paddock of Fleet, which did 8 t/ha, was outstanding. A new vining pea cultivar, Bolero, yielded 8 t/ha. Green beans for freezing also did well at 8 t. One of the best crops was lentils which yielded an outstanding 3.7 t/ha and a gross margin of \$1663/ha.

Not all the news was good. The broad beans collapsed in October and failed to cover establishment costs. However the maize that followed grew a fine crop for silage yielding 13 t of d.m./ha.

1990-91 will be much less successful. Already we have had to plough the broad beans in. They failed totally and despite soil tests, tissue analysis,

virus tests and micro-biologists aplenty, we are no nearer to understanding why the 1987 and 1988 crops were good and the next two crops have been so poor. Peas and wheat both look well this season but the three paddocks in barley have been badly burnt by a herbicide which should have been safe. These reversals coupled with a major fall in grain prices could see the Cropping Farm posting a very small profit indeed in 1990-91.

John McCartin's efforts in recent years were recognised in November 1990 when he was presented with the first Farm Manager's prize. This prize will be awarded annually to the Farm Manager who is judged to have best achieved the stated aims of his farm. John's performance in making a record profit in 1990, his success with new crops and new technology, his high standard of farm maintenance and his assistance to other farm staff, were factors in selecting him as this year's winner.

Research

Bill Pickering manages this complex and interesting 207 ha farm.

Most of the research is initiated and supervised by the Plant Science and Animal Science Departments. Some of their new work may be of interest.

Dick Lucas and Michael Smetham, in association with the Canterbury University Forestry School, have established a six hectare agro-forestry block. The Pinus radiata trees were planted in wide rows in June and five different pasture mixtures were drilled between the tree lines in the

spring. The tree growth will be monitored over the years and the financial and physical returns will be calculated for the livestock and forestry components.

Professor Bullock nears the end of the first year of a project designed to establish the technology of gene transfer in sheep.

Soil scientist, Keith Cameron, has established a large experiment where he is looking at the effects of subsoiling old pasture. To date much of the detailed research on subsoiling has been done on arable sites. We know good results are obtained by subsoiling pastures, but this new work should improve our understanding of the mechanism of enhanced nutrient uptake.

Bill Pickering has the difficult job of managing the stock resource for these and a host of other long and short term programmes. Animal Science technicians, Chris Logan, Steve Kirsopp and Denis Herrick, all co-operate well, as does Martin Keeley, the enthusiastic Manager of the deer and goat farm.

Ashley Dene

Restructuring of Ashley Dene (356 ha) continued in 1989/90. It is now a one-man unit and stock numbers are down considerably on those of the mid-eighties. We have around 1200 first-cross Border Leicester - Corriedales, 900 Corriedales and 200 Booroola ex-trial ewes, with 650 first-cross ewe hoggets wintered in 1990. We intend to winter 1500 - 1600 first-cross ewes and 800 - 900 Corriedales, plus hoggets, in the 1991 winter.

The lambing was 130% (first cross lambing about 10% better than Corriedales). We mated the hoggets last May and have an additional 250 lambs this spring.

Income looks reasonable. Wool will, of course, be substantially less. However, we anticipate achieving last year's lamb return with the male lambs averaging \$40 and the ewe lambs \$30.

The move to rejuvenate the lucernes and sow only the nematode resistant variety AS13R has seen the stands last longer.

However, the main tractor is still running around 600 hours per year. We have been sowing tall fescue for the last three years in an effort to increase the life of the pastures. At this stage we are having more failures than successes but will persevere with limited areas until we have perfected the technique.

The chicory sown last year looks excellent and we will sow more next season.

At this stage the most promising 'new' grasses on this very light land appear to be ryegrass and cocksfoot.

We are grateful to the Manager, Ken Townley, for his efforts in turning the farm around into a unit of which the University can again be proud.

Horticultural research area

The 1989/90 season was a good one for the Horticultural research area - with more developments, good cropping and a number of new trials.

A new block of chestnuts has been planted. These are selections from

all over New Zealand and the trial is run by the 'Chestnut Research Group'. The hazelnut action group have also planted more trees - this phase looks at new varieties as well as trees for management research, particularly into the annoying lack of fruit set being achieved in the district at the moment. The walnuts (Rex Baker memorial trial) are starting to crop at last so the first results should be coming through soon.

The walnuts in the ultra-high density trial (Mr D. McNeil, Plant Science) are now about one-and-a-half metres high so are ready for the application of growth controlling 'PP333'. The other nut trees in this research section are still small and need to grow more yet. Under the same project, the first crops of peaches, nectarines, cherries, apples and pears were harvested. It is an interesting project, but there are a lot of questions to be answered before growers will be planting at densities of up to 20,000 per hectare!!

Several new blocks have been planted over the last three years for pest and disease research, and some of these were old enough for projects this season. It is good to see the area being used by a variety of users. One of these 'outside' users is the local D.S.I.R. and Steve McCartney (based at Lincoln) has a block of Fuji apples on different rootstock and different spacings. This trial is repeated at other sites throughout New Zealand. The main reason is to thoroughly test the new 'MARK' rootstock - but will also, by nature of the trial, give a better measure of differences in tree performance between the main New Zealand growing areas.

The 'protected' cherries fruited well, but split badly when rain came at the crucial time in December. Next to

the cherries are the grapes which were looked after largely by the students in the new wine course.

They pruned the vines, tied them up, harvested fruit and made sample wines from the juice. We hope to expand this area of grapes as finance and the 'high health' stock become available.

Beside the grapes is the Nashi block growing on three different support systems. One of these is an adaption of a French 'Solen' system, where the fruiting wood grows, fruits, droops and then is replaced in a cascading fashion. Apples are also being tried on the same approach in another block.

Opposite these Nashi, the peaches and nectarines are now virtually all mature. Professor Rowe continues work on the crop loading issues as well as looking at a chemical method of fruit thinning - something that has eluded the industry so far. Prof. Rowe is also interested in tree size/vigour control through root management. In one trial he has apples and grapes growing in root-restricting bags. It is too early to see results yet. Another approach to this is root pruning and the D.S.I.R. are following up the effect of annual root pruning on the growth and 'return bloom' of Cox's Orange.

One of the success stories this year was the new location of the shop. We used a garage by the YFC hall and it soon became known by staff and students. Turnover more than doubled. Now people walk for their fruit and don't lose their carpark - quite an issue lately with student numbers booming.

The Biological Husbandry Unit continues to attract a lot of interest.

It's a struggle for Bob Crowder and Geoff Barnett to keep up with the work load now on the expanded 10 hectare area. Much of the area is in ley, but the MAF are involved in a cereal/pulse/amaranthus/ley rotation. Results are good, but birds are a problem on small areas. The main rotation area grew good crops of onions, potatoes and squash. A flame weeder, designed by the Natural Resource Engineering Department, helped weed control in the onions. Some of the produce was sold through our shop, but most of it went to Auckland and Tauranga as well as other local outlets. The organic Granny Smith apple block did not perform very well thanks to the old enemy blackspot. Different mulching treatments have been superimposed on these now.

Lincoln applied to host the International Organic Conference in 1992 - but lost to Brazil at the last moment. This would have focused even more attention on the BHU and Lincoln. There are plenty of interesting potential research projects here at the BHU and it is hoped more people from within Lincoln and beyond will use the area more.

One of the most interesting areas is the Parks and Garden Technology area. Here, students look after a small plot, planting a lawn and annuals. The rest of the area is being planted in trees and shrubs from a range of families for taxonomic teaching. A large collection of magnolias is set to become an extra feature of the area.

With all the blocks being used or under development, new signs, a redesigned entrance and some landscaping around the buildings, the HRA is looking interesting and attractive.

Lincoln Springs Orchard

The orchard is looking tremendous at the moment with good levels of crop on all apple, pear and Nashi varieties. With most of the pipfruit now in its fourth year yields are on target and the trees are in good health.

A disappointing 1989/90 budget result highlighted the two vagaries of horticulture - weather and marketing. Hail, sunburn and a heavy thinning drop reduced the apple income while our main stonefruit export market, Australia, had a much reduced demand for our peaches and nectarines, due to their bumper season.

Fortunately the joint packing/marketing partnership set up between the University and Fruit Trees New Zealand Limited, a local orchard, had run an extremely successful local market promotion with M.G. Marketing and a major national supermarket chain. This promotion offered South Island consumers a high quality of stonefruit, returned us a premium of 10-15% and kept 60-70% of Canterbury peaches and nectarines off the local market which kept the price up for all growers. This year we expect to supply further into the North Island with both stonefruit and Nashi.

However, it has been an up and down year for stonefruit at Lincoln Springs - disappointing export demand, a revolutionary and very successful local market promotion, and a heavy frost in early October. The frost, our first destructive one in five years, has removed 90% of the stonefruit crop. As gross margins for stonefruit are marginal the reduction of further costs on stonefruit this

year will mean there should be little effect on the budget. This fact also shows the strength of the orchard, with its high percentage of return being from pipfruit.

Over the next several months we will decide the future of the stonefruit blocks with options ranging from total removal to a more gradual removal.

On-going redevelopment, which is crucial for all modern orchards, continued over the past year with two stonefruit blocks removed and replaced with centre-leader Braeburn Fiji and Royal Gala apples. Block A1 was grafted over from Red Delicious to Braeburn and Fiji.

The post-harvest complex, 'Fruitpac' had its first packing season in early 1990 and performed well apart from a few mechanical problems. With many improvements made, the complex is now very well set up to handle the much increased crop from Lincoln Springs and the other orchards involved, with some really exciting possibilities emerging in post-harvest and processing areas.

The European pears and Nashi are looking excellent on the Lincoln Canopy systems, which appears well suited to these two crops, producing quality and packouts superior to conventional systems. We have some exciting ideas for Nashi on both husbandry and processing fronts which could increase returns from this crop.

The orchard is in a good position at this stage to hopefully show a positive result this financial year and with the increasing numbers of students and overseas and local visitors it is providing a high degree of interest and leadership in both husbandry and post-harvest areas.

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LINCOLN UNIVERSITY STUDENTS' ASSOCIATION (INC.)

President's Report



Introduction

In my second term as President, I have been able to guide the Association with the help of Executive members, staff, delegates and volunteers on to many achievements for the year, with perhaps a little more confidence and ease than usual.

Like my 1989 report, I have set it out under the seven goals of the Association.

Goal 1: Education (Student support)
To ensure the State provides satisfactory financial and employment support to students.

This year has been the second year of operation of the Youth Support Student Allowances Scheme. The sufficiency of the Scheme was severely compromised this year by the \$1 250 Tuition Fee, such that at half-way through the academic year, full-time students' expenditure had already exceeded their income (including loans) by an average of \$284 (Heylen 1990).

Parents and other relatives now account for a significant proportion of students' income - almost half (47%) of students claim to be either partially or totally supported by another adult of parent. The result has been that students' parents are likely to be more highly qualified and in higher income brackets than the general public.

It is obvious that the combined effect of the former government's policies did little to improve the financial support of students.

Student Job Search achieved 12% more job placements for students in the 1989/90 summer season. While this was an outstanding result, partly due to the re-instatement of the TEAS job subsidy, the increase in student clients (up 18%), meant that the summer vacation was no easier for students desperate for work.

Student Job Search also continued to offer the in-term placement service. The service filled 7 811 jobs nationally, against enrolments reaching 12 798. It is of much concern that students are being forced to engage in part-time work during the term, resulting in deleterious effects on academic success and general well-being.

The 90/91 summer employment season began in October. Government re-instated the TEA Scheme, starting two weeks earlier than previously, with a \$5 increase in the per week employer grant. At the time of writing, the funds allocated to the scheme have unexpectedly run

out. Despite submissions to the new government, further funds have not been made available. Given the saving to the tax-payer of the scheme, this intransigence is doubly tragic.

Goal 2: Education (Welfare)

To ensure access to education at Lincoln University is free and equal, and promote the personal well-being of students.

This year saw the cold realisation of the \$1 250 Tuition Fee. The effect on enrolments nationally was immediate - university roll growth nationwide dropped to 3%, against 6 to 7% in 1989. Of particular concern was the 18% drop in extra-mural enrolments at Massey University, and in part-time enrolments at all universities. While the roll at Lincoln grew another 18%, this related to new and changed courses of study.

Despite the intransigence of the Minister of Education, students' associations continued an active campaign against user-pays in education. Students were encouraged to pay the fee by term instalments - at Lincoln approximately 70% chose to pay in this way. This was planned to allow a boycott of the final instalment at the beginning of the third term.

During the year, a successful media campaign was mounted, on the twin themes of student poverty and fees costing student an arm and a leg. In July, marches occurred across the

country against the then government's education policies.

In the third term, Lincoln was one of the few campuses able to mount an effective boycott of the fee, with at least a third of those students paying by instalments, withholding payment. With media coverage of boycotts at Otago and Auckland, this action applied critical further pressure against the government, weeks before the country went to the polls.

Heartening news here at Lincoln was the withdrawal of most Limitations on Entry to courses. While to some extent this was possible because of the rationing effect of the fee, the removal of limitations has more than a symbolic value. For many students, Lincoln will be the one university where they can be assured of entry.

Goal 3: Education (Academic)

To ensure that Lincoln University provides quality university education.

The Association has continued to play a role as advocate for students in disputes with both academics and the university administration. In most cases, such disputes were resolved both amicably and satisfactorily. The Association wishes to express its gratitude to those examiners who were happy to revise their stance, once the effect of their decision on students was explained.

The continued under-funding of the university system is of deep concern to the Association. Long-term cost-cutting has led to high staff student ratios in some departments, which are in many cases placing an unsustainable strain on academics. Scholarship is suffering as tutorials are cut, opportunities for debate of subject material lessen, and feedback

to students on their academic success is compromised.

The Association has sought to become more pro-active on student assessment issues, through the formulation of policy on assessment. After an exhaustive process of discussion, this policy was adopted by a general meeting. 1991 will see it promulgated to academics for their information, and for continued refinement.

Goal 4: Services

To ensure that quality student services are provided at a minimum cost to the benefit of all students.

History will hopefully mark 1990 as a landmark year in the field of student services. Pursuant to the 1990 University Corporate Plan, the President, and General and Administrative Vice Presidents participated in a working party with university administrators and academics to review the current management and provision of the various university-provided student services. One innovation that was flagged prior to the report, was the constitution of a Student Services Committee, to provide a strategic overview of all student services. This will replace the Union and Halls Management Committee, the Recreation Centre Management Committee, and the Student Welfare Committee.

While the recommendations remain privy to the Vice Chancellor and Registrar, the Association is confident that the bulk of them will be implemented in 1990. It should be noted that on the important issues, most members of the Working Party on Student Services were in agreement. The Association found

the working party to be very positive exercise, and wishes to thank other working party members for their outstanding contribution to the welfare of students.

The Stein Programme run by the Association has continued to be a very successful service. During the year, the Association employed Alex Beijen, a student with extensive public bar service experience to manage this programme. He has worked to develop the success of steins even further, with promotions and activities to liven the end of the student week.

Development of the souvenir shop was examined for much of the year. Initial research was made into the feasibility of upgrading the shop into a full-time operation, retailing a much wider range of goods. A new site for the shop will be a key determinant to its success - unfortunately the proposed site became unavailable. A further site has been identified, but the development cost was prohibitive, without a more detailed investigation. This will be a priority for the Association in 1991.

The Executive made history again by deciding to employ a full-time editor for the Association's publications. Gerrard Malcolm, just graduated from the University of Otago, has been appointed, and is already preparing for the coming year. The Association intends that its publications further improve in quality of content and layout, to better serve the needs of students.

Goal 5: Activities

To provide cultural, sporting and social activities directly and through the encouragement of affiliated clubs.

'Life's a Beach' Orientation Festival 1990 was a great success, thanks to the Campus Activities Manager Cherie Mansell and her merry band of managers and volunteers. Attendance reached 3 500 for the festival, indicating that the greater proportion of first-year students went to several events. The Association is grateful for the substantial sponsorship support it receives for the Orientation Festival.

The Association continued to foster and encourage club activity, through administrative support and guidance, professional advice, grants and fundraising opportunities. The Boardriders, Volleyball and Rugby League Clubs were notable in the strength of their activity. The Boardriders hosted for the second-year running a highly successful South Island surfing conference on campus, putting land-locked Lincoln on the surfing map.

The Association also reviewed the club affiliation systems, with the objective of making the affiliation process, benefits and requirements more appropriate to the different types of clubs on campus. In particular, the review recommended that clubs which desired it, be permitted to become separately incorporated societies. Early indications are that the LU Rugby Football Club intends to take up this option. The Association wishes the Club the best of luck after some recent troubles, and looks forward to a continuing co-operative relationship.

The final activity of the year, the infamous 'Garden Party', went off without a hitch. Students were treated to good music and cheer on a glorious final day of lectures. The success of this event was in marked

contrast to the similar event at the University of Canterbury, which attracted much negative publicity in the local media.

Goal 6: Public Affairs

To promote discussion of issues concerning students as members of society, and act to promote the collective view of students where appropriate.

Being an election year, the Association provided a well-attended series of election forums on campus. Speakers included the then Minister of Finance, David Caygill; the Opposition Spokesperson on Education, Dr Lockwood Smith; the Deputy Leader of the Opposition, Mr Don McKinnon; and the Opposition Spokesperson on Finance, Ms Ruth Richardson amongst others. From the standard of questions, it was obvious that students were very much aware of election issues, not the least of which being each political party's education policy.

Goal 7: Finance

To minimise the cost of membership through maximising the efficiency and effectiveness of the Association.

Improved financial control systems, and an increasing student roll, allowed the Association to hold its subscription for the 1991 year at \$85, while providing more and better services to students.

The balance sheet continues to improve, with liquid funds reaching almost \$200 000. A substantial portion of this is from the Building Reserve, which is likely to be sorely taxed in the next few years as the increasing membership dictates the need for new facilities on campus.

The Association has also changed accountants this year, hiring Spicer Oppenheim on a trial basis. It is hoped that they will be able to fill all the Association's accounting and financial management advice needs.

General

The closing days of 1990 marks for myself the end of a seven-year involvement in the Association, in many different roles. I have enjoyed and benefited from this involvement enormously, and will leave with many fond memories. I am confident that I have left the Association in better shape than when I started, and that my successors have a vibrant organisation to build on. I wish them, and in particular my successor Dan Ormond, the very best.

In my time at Lincoln, the institution has changed remarkably. The student roll has grown in leaps and bounds in the last two years, and its make-up has diversified for the better. Within both the student and staff body, there is now an atmosphere of quiet optimism for the years ahead. A target of around 3 500 students by 1993 has been set, and I certainly hope it is reached.

It has become something of a tradition for the outgoing President to scold the institution for various failings. This I am not about to do, but I do think the institution's future success in the education market place will rest on a number of factors.

Firstly, it must not sacrifice educational quality in the battle for equivalent full-time students. A shake-out amongst institutions must occur within the next five years, and only the quality providers will survive. Lincoln must ensure that it provides a true university education,

and that its students graduate with a qualification they can hold up high.

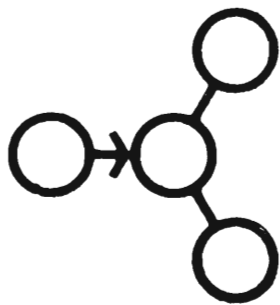
Secondly, it must not forget that a university educational experience is not complete without exposure and encouragement into extra-curricular activities and experiences. Scholastic requirements must never prevent students from learning outside the academic sphere, and student

activities and facilities cannot be marginalised without cost.

Finally, it is vital to Lincoln's future success that it engenders in students a long-lasting affection and pride for the place. A university is made up not only of its current students and staff, but also of its past students. Lincoln will undoubtedly need students after they graduate to

support the university in its endeavours, and to promote it by word of mouth to each new generation of potential students. The recipe for success is therefore this - put students first now, and students will put Lincoln first in the future.

Michael James
PRESIDENT



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LINCOLN UNIVERSITY ALUMNI ASSOCIATION (INC)
1990 - 91

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Mr T.D.J. Holderness, Stony Bay Road, Akaroa
Mr C.P. Tebb, 23a Flanders Avenue, Napier
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Mr R.L. Engelbrecht, Grahams Road, RD Ashburton.

Secretary/Editor

Mr B.T. Robertson, Lincoln University, Canterbury

Assistant-Secretary

Ms D.J. Atkinson

Treasurer

Mr D.L. Newman, Lincoln University, Canterbury



Executive (from left): Phil Beatson, Elizabeth Cruickshank, Brian Milne, Jan Atkinson, Brian Robertson, Gerard Scott, Denise Clemens, Bob Englebrecht, Ralph Lattimore and Derek Newman.

Branches of the Association

Northland	Don Low, Crane Road, R.D., Kamo
Auckland	Glen Johnson, 17 Mewburn Avenue, Mt Eden, Auckland
Waikato	Dave Smyth, 7 Lake Domain Drive, Hamilton
Gisborne/Poverty Bay	John Fitzharris, 62 Douglas Street, Gisborne
Hawkes Bay	Brent Pownall, MAFTech, Hastings
Taranaki	Peter Wilkes, R.B.F.C., Private Bag, New Plymouth
Palmerston North	Tim Mordaunt, P.O. Box 5074, Palmerston North
Wellington	Bob Riddell, MAFTech, Wellington
Wairarapa	Stuart Harvey, P.O. Box 190, Masterton
Marlborough	Tony Milson, C/- Landcorp, P.O. Box 794, Blenheim
Nelson	Dick Bennison, C/- Duke and Cooke, 308 Hardy Street, Nelson
Canterbury	Brian Robertson, Lincoln University, Canterbury
South Canterbury	Bill McKellar, 19 Bidwill Street, Timaru
Otago	Grant Barron, Reid Farmers, Private Bag, Dunedin
Central Otago	Brian Booth, C/ MAF, P.O. Box 276, Alexandra
Southland	Hunter Milne, P.O. Box 814, Invercargill

Australia

Victoria	Keith Graham, 2 Barnston Place, Ringwood, Victoria 3134
West Australia	Peter Falconer, 4 Clive Street, West Perth 6005, Western Australia
Adelaide	(Contact) Kelly Donaldson, 20 Spenser Street, Cowandilla, Adelaide
Tasmania	(Contact) John Gatenby, Creekton, Cressy, Tasmania

President's Message



Lincoln's year of autonomy celebrations is over. It was a year marked by many functions celebrating Lincoln's new status as an autonomous university. We witnessed the opening of the new Stewart building, plans for further building developments, new courses, a new charter, elections for a new Council and enjoyed the Graduation Dinner attended by alumni, staff and students and at which the world famous children's author Margaret Mahy gave an entertaining after-dinner address.

Our own AGM approved changes to our Rules, principal among which was a change in name. The word 'alumni' derived from the verb **alere** - to nourish - is now widely used in Britain, Australia and the USA, and identifies a former student with his or her alma mater. The choice of that term is significant. At university our minds and bodies are nourished; when we come to graduate the nourishment continues but now it is a two way flow. It becomes our turn to offer some nourishment back.

Because the first object of our Association is to 'further the objectives of Lincoln University', this year I assured the Vice-Chancellor, Professor Ross, of our full support and expressed the wish of our Association to collaborate with the

University in as many ways as are appropriate.

We all gained from Lincoln's past - now as Lincoln charts a new autonomous path into the future, let our alma mater gain from us.

Never miss an opportunity to promote a Lincoln University education and give other support when asked.

Among other universities in N.Z., Lincoln stands tall, strong and unique, with a solid history of excellence behind it. And whilst the importance of intellectual rigour should not be underrated, neither should the special character of a Lincoln education. The human factor has never been neglected at Lincoln and that contributes much to that special character we have all experienced but find difficult to express in words.

In his Presidential message in 1966, doyen of the Association and Honourary Life member, the late Dr Ian Blair referred to the possible roles Branches could play in addition to holding an annual social gathering.

In particular he mentioned the valuable function Branches performed in assisting fundraising for more Halls of Residence at that time.

Those alumni who had the benefit and privilege of 'Halls experience' will concur with Ian Blair's belief that 'the strength of the Association is founded largely on the appreciation members had of the quality of residential life they enjoyed at Lincoln.' When he wrote that about half the student body lived at Lincoln. Now it is less than one-third. So other ways must be found to bridge the gap for those who are unable to experience residence at Lincoln.

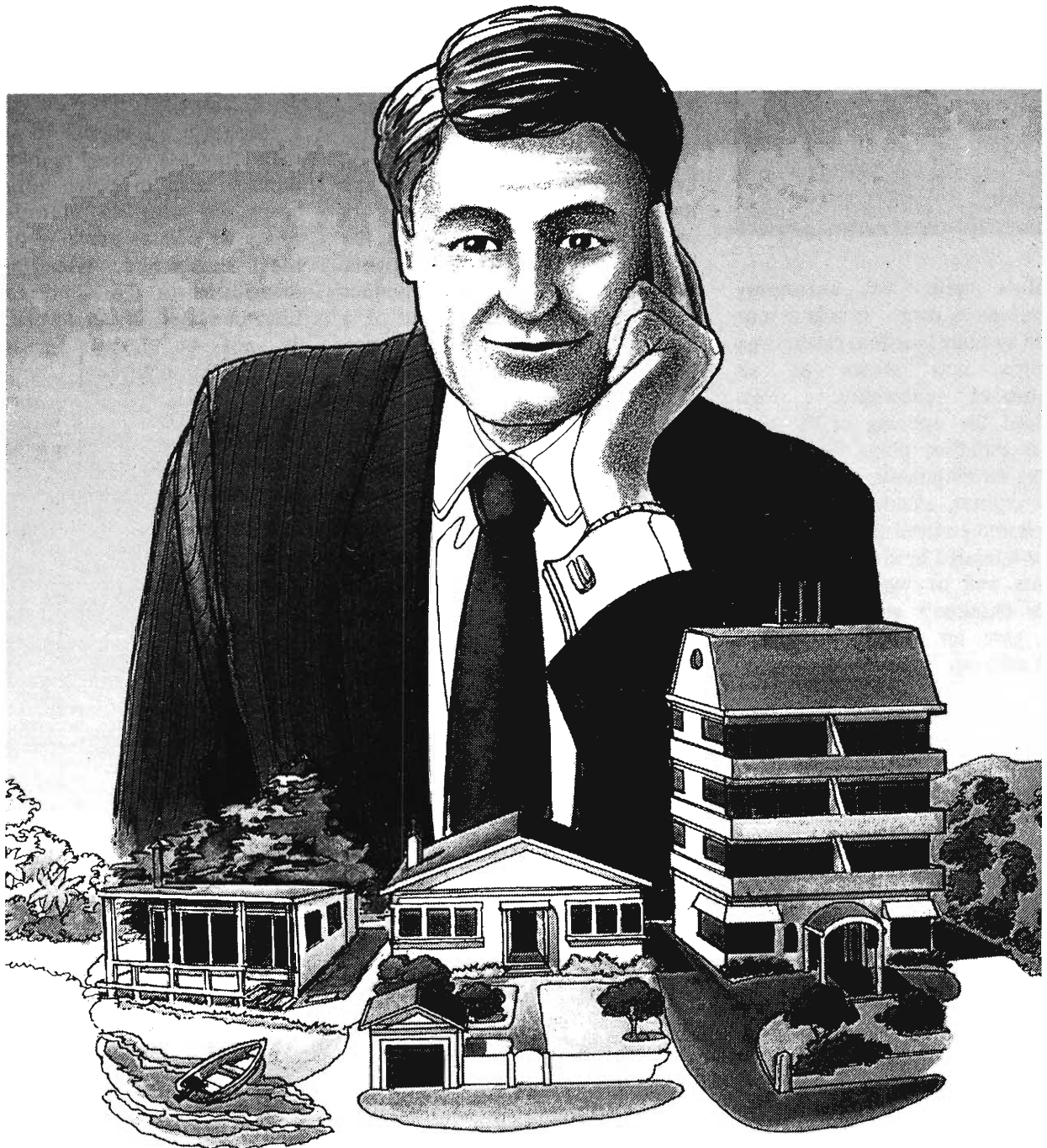
In December we all received the first issue of "Lincoln Outlook", a fine

effort in communication produced by the Centre for Community Relations at Lincoln under the direction of Dr Paddy Austin. That, together with this magazine, will serve to bind even closer together those links between Lincoln and her alumni, links that were forged many years ago by Ian Blair, Cuthbert Tebb and many others who assisted in the formation of Branches throughout the country.

I encourage all alumni to support their Branches, attend reunions and thereby keep in touch with each other and with the University to whom we owe so much. When the time comes to give dignified recognition to the significant part Lincoln played in our formation let us not be found wanting in generosity.

J.B. MILNE

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BRANCH REUNIONS

Canterbury

The AGM and Canterbury Branch meeting was held on 26 April at Lincoln University. President, Phil Beatson welcomed the fifty-five members and partners, noting in particular the presence of Lady Ruth Burns and Mrs Grace Blair.

The meeting debated a notice of motion calling for changes in the Association's rules, in particular a name change from 'Lincoln College Old Students' Association' to 'Lincoln University Alumni Association'.

The motion was carried unanimously.

Phil Beatson presented the following report:

I am pleased to present the President's report for 1989/90. By and large the year has seen the executive consolidate on initiatives and direction taken previously.

The Ian Blair Memorial Fund has been launched and all Old Students have received information about this. Naturally, the generosity of Old Students will determine what can be achieved but the Executive sees the priorities as being the establishment of a post-graduate scholarship fund, and the renovation and refitting of an area in the South-west wing of Ivey Hall adjacent to Memorial Hall as a museum. Funding permitting, a chapel has also been suggested.

During the year Lincoln University produced its interim (draft) charter. The Executive responded to this initial document by suggesting that the final document should directly acknowledge the University's traditional roles in the land and water based primary industries. Further, our submission requested that Lincoln University's charter

should acknowledge that these industries will continue to be important in its future role. I am happy to report that the redrafted charter is very acceptable to our Executive. Also, the composition of the University Council will include two ex-students.

The proposed name change of our Association also occupied our executive which thought long and hard about alternative names to 'Old Students'.

The LCOSA 'bursary' has been renamed a scholarship and current students and school leavers are eligible to apply. I thank Ralph Lattimore for the effort he made in revising the conditions for this award. This year it attracted nearly 40 applications, about 30 being from school leavers, and the standard of application was very high. The 1989 recipient was Paula Feast, while the 1990 award is shared by 2 first-year students; Marie Schaffer and Oliver Clifton.

Our most prestigious award, the Bledisloe Medal, has this year been awarded to Dr Peter Pottinger, who will address us later this evening.

It is pleasing to report that the branches have been active in the past year with many reunions reporting increased attendances. It is noticeable that the committees of several branches include recent graduates who are keen and successful at encouraging their peers and to attend and participate. This influx of younger members is certainly required in the branches.

Currently a new branch is being established in South Australia but the proposal for a new branch in Rotorua/Tauranga has been shelved.

Our drive for new membership continues and it is becoming increasingly obvious that the end-of-year wine and cheese function for final year students is providing most of our new members.

Brian Robertson continues to serve us outstandingly well in his capacities of Executive Officer, Secretary and Editor. The decision to create the Executive Officer's position has been successful in no small part to Brian's contribution. I believe there is an ongoing need for this professional position - we are faced with an increasing amount of administration and it would be unfair and unrealistic to expect an unpaid office-bearer to handle this efficiently. Brian's 1989 magazine to mark Lincoln's autonomy deserves mention and he should be congratulated not only for its production but also for his initiative in producing a special edition.

I also thank the Executive Committee's of the last two years for the time and effort they have put into their tasks. In particular I thank Bob Engelbrecht for his continuing dedication and enthusiasm to projects begun in his term as President, and to Derek Newman for filling the breach as our Treasurer for the past year.

The Association is facing some exciting challenges in the next few years. I am confident the Executive has people with the desire and ability to meet these challenges and to forge an increasingly meaningful and vibrant role for our Association.

The Treasurer moved the adoption of the accounts for the year ended 31 March 1990. A copy is published herein.

The meeting elected Mr J.B. (Brian) Milne to the office of President, Ms Jan Atkinson as Vice President and Dr Ralph Lattimore as Junior Vice President.

The golf match was won by Roy Hampton.

An address by Dr Peter Pottinger, the 1990 Bledisloe Medalist, followed.



Mrs Grace Blair, Mr Brian Milne and Lady Ruth Burns pictured at the Canterbury 1990 AGM

Emeritus Professors J.W. McLean and T.W. Walker chatting with Bledisloe Medallist, Dr Peter Pottinger.



Staff, alumni and partners enjoy pre-dinner drinks before the 1990 Graduation Dinner.

During the graduation dinner, Alumni Brian Milne proposed the toast to Lincoln University. His speech follows:

Toast to Lincoln University

Distinguished guests, men and women of Lincoln,

On this grand occasion of the 1990 graduation dinner I'm delighted to be here to propose the toast to Lincoln University.

I first came to Lincoln, or Canterbury Agricultural College as it was known then, in March 1959 having arrived in New Zealand from Scotland just six weeks earlier. What followed was an experience, or should I say a spectrum of experiences, which I've never forgotten and certainly never regretted.

I was here in the days of Sharkey, Dolly, Trotsky, Albie, Montie, Shirty and Joe, under the extremely capable leadership of Doctor, later Sir Malcolm Burns.

To me the Lincoln experience was enriching and rewarding. I'm sure I speak for everyone who has been here when I say Lincoln shaped our personal attitudes and values as well as giving us a darn good education and it was here that I first met my wife.

I recall:

- The Lincoln concerts in the village hall, especially Neil Gow in a ballet dress.
- The University Tournament - winning the drama competition thanks to the tremendous coaching from Lady Burns.
- The world record for pushing a bed round Hagley Park with Peter Nuthall and Company.

- It was a time when at Lincoln we had to wear ties at all times and ask permission to entertain females in our rooms.

- The Lincoln pub was out of bounds.

Such were the character-building requirements 30 years ago.

This institution which we fondly call Lincoln is old by New Zealand standards. It has 112 years of rich heritage of which we are all proud.

Begun in 1878 as the School of Agriculture with 44 students, it celebrated 100 years in 1978 with 1344 students.

From 1886 to 1961 it was known as Canterbury Agricultural College and in 1962 when it became known as Lincoln College, University College of Agriculture, there were 350 students.

The sixties, seventies and early eighties were the times of phenomenal growth for Lincoln.

In the late 1980's the autonomy of Lincoln was under threat as various options were considered for its future but in 1989 one could say reason prevailed and Lincoln University was established.

Today the student roll is in excess of 2,000.

Quo vadis! Or where to now Lincoln!!

The roots of this institution are firmly planted in the land. Lincoln draws its strength from 112 years of involvement with agriculture. More recently it has concerned itself with horticulture, parks, recreation and tourism, and commerce, all of which are essentially land-based.

Lincoln is unique in that it has provided the leaders for New

Zealand's most important economic activity - primary production and marketing.

It has its own old students association, established in 1904 and which over the years has preserved Lincoln's living history and encouraged reunions of old students throughout New Zealand, in Australia and the United Kingdom. No other university has such a successful organisation.

I hope that with the establishment of the University we can create a Lincoln University Alumni Association which will include all those closely associated with the University as well as old students.

It has, as the late Ian Blair, concluded in his excellent book "They Seed They Sowed", (1978),

"A student/staff corporate spirit which is unexcelled, which derived from a close personal relationship between all members of the college community and which thrives on the unity that is peculiar to a relatively small university".

To succeed in the future all organisations need to draw strength from their past experiences.

The challenge to this university will be to continue to do what it does best and not be enticed into spreading its resources too thinly across a wide range of disciplines.

'Stick to your knitting' is a well respected dictum in business today, especially as we reflect on the demise of a large number of organisations which grew too fast and got involved in activities they'd no experience in.

Conclusion

In 1962 when I was President of the Students' Association, Canterbury Agricultural College became Lincoln

College, University College of Agriculture. In 1990 as I become President of the Alumni Association, Lincoln College becomes Lincoln University.

I'm proud to have been associated with such a grand institution over the past thirty years.

I'm sure those of you who are students here tonight will look back in another thirty years to your days at Lincoln and say "Yes, I was there".

To Bruce Ross and all the staff and students we wish you well as you take "our Lincoln" into its future as Lincoln University.

Men and women of Lincoln and friends, raise your glasses and drink a toast to Lincoln University.

Wellington

On Wednesday the 21 November, 45 old students and their partners attended the annual Wellington Reunion held at the Burma Lodge, Johnsonville. Our guest speaker was Professor Bruce Ross, who gave the group an excellent review of progress at the University. The oldest students present, Malcolm Cameron and Lofty Kelman, each received an Alumni tie.

Whangarei

On Thursday 29 November, 70 old students and their partners attended a most enjoyable reunion at the Whangarei Golf Club. The Guest Speaker was Mr Bob Cunis, recently retired as Manager of the New Zealand Cricket Team and currently a New Zealand selector. He gave a most entertaining insight into the highs and lows of managing the New Zealand cricket team on their recent tour.

Alan Burns proposed the toast to the University which was replied to by

Brian Milne, President of the Lincoln University Alumni Association. We were indeed fortunate to have Brian with us and be put in the picture as to what is happening at the University.

A moment's silence was observed in memory of Gary Bacon who passed on during the year. Gary was a good supporter of the Lincoln Old Students.

In all, 65 people attended, including the following old students:

David McCarthy	Clyde Guest
Alan Burns	Tony Eastgate
Jim Leslie	Ross Clark
Michael Nyssen	Angus Ross
Rodney Potts	Martin Salter
Andrew Wiseman	Vance Winiata
Gerald Mannion	Alastair Robinson
Peter Woodward	Bryce Manderson
Rex Scharnweber	Chris Baker
Chris Fox	John Nicholls
Russel Garton	John Saunders
Kevin Evans	Murray Jones
Matthew Buchanan	Gary Thorne
Graeme Smith	John Kerr
Paul Reidy	Lindsay Fraser
John Woodward	Howard Smith
Dick Parkinson	Kevin Easterbrook
David McNaughton	Jonathon Davies
Alastair Nicholls	Graeme Larsen

South Canterbury

The 38th reunion was held at the Caroline Bay Tearooms on 27 April 1990. The President, Neil Barton (1966-67), welcomed 38 old students and 13 partners, two guest speakers and Bob Engelbrecht (Immediate Past President of the Association). Attendance was lower than usual, largely due to clashes with the local final of the Skellerup YFC in Timaru and the Lincoln graduation ball. To avoid the graduation next year our reunion will be moved forward to Friday, 19th April 1991.

One death was recorded - that of Ernest Kerr (1927-29), who died on 6th April 1990.

Following the roll call Ken Shirtcliff (1946-47) received an Alumni tie as the oldest qualifier.

Officers elected for 1990-91 were:

President	John Williams (1968-69)
Secretary	Bill McKellar
Auditor	Arthur Rowell

The toast to the University was proposed by Ken Shirtcliffe and that to the Alumni by our President.

Both toasts were replied to by Bob Engelbrecht who explained changes in organisation at Lincoln as well as the new names agreed on at the AGM at Lincoln the previous night.

The guest speakers were former students, Neville Robertson (Waitohi) and Roger Slater (Hilton), farming near Temuka. They jointly gave interesting talks on their travels in the United States of America and Canada, as well as the production of lawn grass seed in Oregon. They stated that there was a good opportunity for local growers to produce this seed for the United States market to satisfy a big demand for sowing lawns and golf courses there.

Farming

- Tony Gegan is now at Four Peaks, Geraldine
- Martin Hall is now at Kapuka South, near Invercargill
- Dave Musgrave is at Wahi Bush, Woodbury, Geraldine
- K.J. McKeown now lives at Ruapuna, Ashburton County

Retired

- Owen Jones and Ted Parr have left farming to live in Timaru

Movements

- G. White now with MAF, Ashburton
- R.J. Wilson now with RBFC, Ashburton
- P. Flannery now with RBFC, Timaru



Ross Barclay, Rei Apatu and John Mauger at the Hawkes Bay Branch reunion.

- R.A. Ford now with RBFC, Christchurch
- A.G. Watson now with RBFC, Alexandra
- L. McLeod now with RBFC, Timaru
- N. Shirtcliffe now with National Bank, Christchurch
- S.W. King now with ANZ, Hamilton
- Ken Shirtcliffe has moved from Geraldine to Waimate
- Nigel Kerr has been appointed Administration Officer at McCain Food Limited's Washdyke pea processing plant. The Canadian-based company purchased the factory set up by local pea producers following Watties' closing it in 1988.

Valuers

- The New Zealand Institute of Valuers has awarded its highest recognition, the John M. Harcourt Memorial Award, to Ted Fitzgerald of Timaru. The award has been made for his outstanding service to the valuation profession nationally, through the promotion and development of new computer and electronic technology now in extensive use by the institute and the valuation profession throughout New Zealand.

- Former Association President and Ashburton valuer Bob Engelbrecht is now involved in settling land valuation disputes in Mid- and South Canterbury through his recent appointment to the South Canterbury Land Valuation Tribunal.

Shows

- John Blair (Dip.Ag. 1976) is President of the Waimate A & P Association. He is the grandson of James Blair (President in 1932) and son of Bill Blair, who was president in 1953.

YFC

- Lincoln Alumni Alister Body (B.Ag.Com 1983) was recently elected national president of the New Zealand Federation of Young Farmers' Clubs. He milks a herd of 290 jersey and jersey-cross cows near Methven.

Rural Bank

- Bob Webber (Dip.A.B.Ag.Com) is Manager of the Bank in Timaru.

Hawkes Bay

Thirty alumni gathered at Bridge Pa Golf Course on 28 September for the annual dinner of the Hawkes Bay Branch.

Chairman, Steve Wyn-Harris, had organised tenpin bowling and an afternoon golf match.

John Mauger, fresh from the Turoa skifield, proposed the toast to the University. He observed that six alumni present (Rei Apatu, Ross Barclay, Mike Crooks, Joe Harty, John Nimmo and himself) were students in the early fifties when the total roll was less than 150. Then, team work, community spirit and a sense of purpose were strong. He expressed pleasure at the presence of a number of recent graduates, and gratitude for what a Lincoln education had given him. 'The primary industries are tending to get buried so we have to think where we are taking future generations,' he said.

Alumni Association Executive Officer, Brian Robertson, replied bringing those present up to date on developments at Lincoln and within the Association. The meeting observed a minute's silence in memory of Monte Cooke.

Among the apologies for absence were those from Honorary Life Member Cuthbert Tebb with whom Brian Robertson spent an enjoyable hour, and Mary Johnson.

The guest speaker was Graeme De Gucci, owner of 'Horlicks'.

Officers elected were:

President
Secretary
Committee

Chris Serman
Brent Pownall
Peter McKie
John Hudson
Mike Crooks



Cuthbert Tebb

Auckland

Once again the evening was highly successful with a record turnout of 120 people.

The success was such that we had to double the beer order after pre-dinner drinks to allow the function to continue through successfully to 1.30 a.m. Thanks should go to the committee of Glen Johnson, Mary Jo Paterson, Tim Crawford, Clayton Munting and Julie Dunn.

Guest speaker Derek Newman of the University enlightened us all of activities in Canterbury and was an especially popular choice by some of the more recent graduates. With the function being held the night before the Scottish Test a number of out-of-towners were present including some as far-a-field as Gisborne, Wellington, Christchurch and Waikato. The jokes were at their usual standard. However with the large contingent the committee is looking at ways of shortening the joke section to allow more time for general chit-chat.

The election of officers resulted in a similar committee with Glen Johnson once again president.

Those present included:

John Chilton
Doug Snell
Mary Jo Paterson
Christine Chilton
Bruce Waite
Kent McMillan

Michael Hill	Brian Hayr
Jill Corey	Bob Diprose
David Todd	Andrew Allan
Lloyd Cundy	Dave Taylor
Matt Josephson	Tim Martin
Ginny Douglas Clifford	Simon Smith
Hamish Watson	Hamish Wright
Raymond Birds	Guy McIndoe
Scott Montgomery	John Murray
Mike Moore	Mark Auld
Peter Alexander	Peter Anderson
Bruce McPherson	Pete Bennett
Ian McGowan	Jan McGowan
Bruce Steel	Dan Batchelor
Richard Pratt	Viv Wadsworth
Mark Neilsen	Chris Wise
Brendon Gibson	Jan Williams
John Cullan	Doug Cherning
Ollie Saxton	Nich Hargreaves
Glen Johnston	Julie Dunn
Tim Crawford	Bruce Jefferd
Nicki Jefferd	Bruce Minogue
Tim Strawker	Dave Smith
Bruce Smith	John Gibson
Rod Brody	Kenny Digby
Robin Digby	Tim Harris
Brian Headly	Nelson Chamberlain
Leonie Freeman	Derek Newman
Richard Rennie	Jeremy Peacocke
Fionia McKellar	Jenny Lear
Jill Gardiner	Deborah Towse
Peter Barraclough	Warwick Graham
Bryce Simpson	Allen Rendle
John Darroch	Phillipa Wells
Claire McAlpine	Paul Bishop
Jeanette Dobson	Chris Gemmell
Western Kerr	Clayton Munting
Dave Powell	Christie Powell
Barry Bently	Steve McLissac
Fiona McKlean	Mark Jackway
Dave Poole	Jason Higett
Jeff Ross	Sandra Hays
Ginny West	Richard Gerrard

It was unfortunate that five members stated they would come, were catered for and then did not turn up. Their names have been noted - BEWARE!.

The trend is for younger alumni to attend reunions. Efforts by the committee to encourage the 'originals' has resulted in lack of interest. We welcome all members.

Otago

Association Patron and Vice-Chancellor, Professor Bruce Ross, attended the Otago Branch reunion on 9 November.



Among those present were:

Kevin Duggan	Lesley Cushnie
Steve Aslime	Jazz Hewitson
Campbell Dykes	Lynda Gray
Mark Bowie	Lizzie Carruthers
Grant Barron	Humphrey Jagger
Jennifer Bragan	Dick Bragan
Geoff Holgate	Graeme Burborough
Liz O'Connell	Trish Burborough
Ian Ross	Chris Johnson
Tim Creighton	

Southland

Roger Minchin reports that the Southland branch reunion was held at the White Heron in Invercargill. Due to frost and fog delaying planes, the Lincoln speakers were delayed and did not arrive until 9 p.m. Surprisingly with a reunion in mid-winter this is the only time that we had this type of disruption. Present were 35 local old students and Philip Beatson, Immediate Past President of the Association, and Tony Bywater, Professor of Farm Management from Lincoln. The meal and fellowship was of the usual high standard, followed by roll call, traditional stories, a brief AGM and discussion with the Lincoln speakers on recent changes in the Association, the College/University and aspects of farm management. I personally find it difficult not to refer to Lincoln as the College and our organisation as the Old Students Association, perhaps that is good a reason to retire as local secretary as any.

Officers elected:

President	Mike McCurdy
Vice President	Warren Brown
Secretary/Treasurer	Hunter Milne

The outgoing secretary, Roger Minchin, who retired after 19 years in the position, was given a vote of thanks by the meeting.

Those present included:

John Scandrett	Chris Heenan
Dave Foster	Travor Thayer
Derek Kooman	Bob Dykgraaf
Warren Brown	Stan Still
John Hodgson	Michelle Paul
Aaron Pemberton	Mark Bowie

Phil van Eedn	Craig Laing
Blair Morgan	Mervyn Cave
Murray Halstead	Pete Moynihan
Sue Heffernan	Peter Barnett
Hunter Milne	Jeffrey Morrison
Blair Fields	John Henderson
Charlie Moffat	Elizabeth Cruickshank
Steve Winter	Mike Heffernan
Don Laurie	Richard Ferris
John Saunders	Gordon Bailey
Roger Minchin	Graham Cooney
Mike McCurdy	

Manawatu

Tim Mordaunt organised the 1990 Manawatu Branch reunion which was attended by Graham Tate, Director of the University's Education Unit who was the guest speaker.

Over 40 alumni (mainly diplomates) and 18 spouses attended. Among those present were:

Tim Mordaunt	Don Brown
Neil Hobson	Don Norman
Ian Eva	Stan Cull
Mike Hare	Peter Brabun
David Buchan	Ian Taylor
Monte Brown	John Marshall
Max Tregonning	Denys Nichols
Andrew Watson	Bob Bosh
Peter Clayton	Maurice Bailey
Mike Giesen	Richard Harrster
Ash Cairns	John Sistey
Bruce Mills	Rusty Futh
Simon McKay	Chris Leagy
Dave Parker	Jim Pollocki
Ian Gilray	Elywin Violach

Victoria

32 members and guests attended the Victorian annual dinner on 2 November at Squizzy's Corner Restaurant at the World Trade Centre in Melbourne. A further 16 members tendered apologies.

The good turn-up resulted from the decision of the Executive of the Alumni Association to support the Victorian Branch by sending Dr Ralph Lattimore (Reader in Economics at Lincoln) from New Zealand to be guest speaker and Branch Secretary, Keith Graham's (1961/63) plea to members for a good attendance.

Peter Coates (1957/59) was Chairman, Don Lawson (1960/66) proposed a toast to Lincoln. Ivo Dean (ex-Massey) proposed a toast to Massey, Ron Hay (1957/59) thanked Ralph Lattimore for his talk which covered news of Lincoln and the New Zealand political and economic climate.

Other Lincoln Alumni in attendance were:

R.G. (Dick) Baylis	Peter Newman
Gerry Rabbette	Robert Latimer
Brent Rodden	Jim Cone
Arthur Ranken	Michael Hay
John Barclay	Alan Scherp
Wally Allen	Ross Sutherland
Brian Arnst	

The meeting was particularly pleased to welcome recent graduates Tom Edwards, Cameron Cole and Harry Lawson and it is hoped that in future years more younger alumni will attend the function.

The group was saddened to learn of the death of one of its favourite members Mr Alan Y. (Monty) Montgomery.

South Australia

Kelly Donaldson organised a meeting in Adelaide attended by a small group of alumni. Ralph Lattimore attended and reports that there is a potential membership of over 60 in South Australia.

Tasmania

Those present at the reunion were:

Philip Reader	Martin Dumaresq
Harvey Gee	John Mills
Kerry Kilby	Peter Hughes
Tom Crossen	Allan Rnason
Monte Lester	Snow Thomas
John Gattenby	David Gattenby
Keith McLaughlan	Brent Ranson
Philip Lester	Bill Gatenby



Jim Cone, Arthur Ranken, Robert Latimer, Ron Hay, Peter Coates and Michael Hay at the Melbourne reunion.



Wally Allen, Keith Graham, Gerry Rabbette, Ivo Dean and Dick Bayliss at the Melbourne reunion.



Some of those attending the Tasmanian Alumni meeting:

Left side (L to R): Bill Gatenby, David Gatenby, Martin Dumars, Tony Ford, Peter Hughes, Snow Thomas, John Schloumater, John Mills, Rick Radcliffe and Tom Crossen (rear).

Right side (L to R): Mike Carr, Brent Ranson, Alan Ranson, Kerry Kilby, Marty Laster, Keith McLaughlan, Phil Reader and Phil Lester.

As Professor Ralph Lattimore was going to be in Australia attending the Victorian Branch reunion the Association Executive decided it would be worthwhile making formal contact with alumni in Tasmania and South Australia.

Thanks to the sterling work of John and Bill Gattenby a meeting was convened in Launceston on 2 November. A Committee (John Gattenby, Tom Crossen and Rick Rockcliff) will act in a liaison capacity and endeavour to update the list of alumni. Most attending the meeting favoured the establishment of a branch.

Taranaki

Peter Wilkes organised the reunion held on Friday 6 July. The meeting of 35 alumni and partners was

attended by Phil Beatson, immediate past-president of the Association, who was the guest speaker.

The committee organised a nine-hole golf tourney in the afternoon.

Wairarapa

The 1990 Annual Reunion was held on 10 August with 48 alumni attending. George Pottinger proposed the toast to Lincoln University. Guest speaker was Lane Penn who spoke on the funnier aspects of his career as an All Black selector.

Branch Chairman, Phil Guscott, tried to resign his office but Don Todd pointed out he had not the mandatory 15 years. Phil was outvoted 47 to 1. Stuart Harvey

continues as secretary.

Waikato

Seventy-one alumni attended the Waikato Branch reunion on 13 June 1990.

Sharon Orr proposed the toast to Lincoln University and staff member Rod Plank replied.

Bruce Grinlenton was elected Chairman and the alumni tie was awarded to John Fairclough.

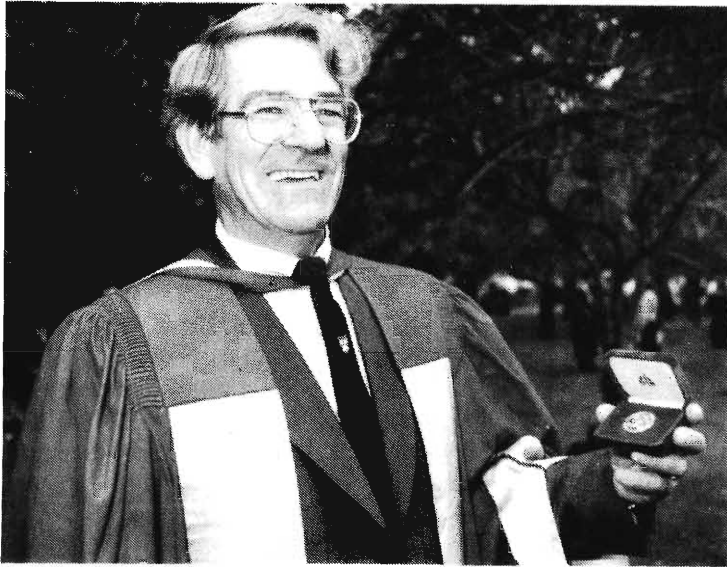
Secretary, Dave Smyth, reports that the Branch made a handsome profit on the dinner, probably because the chef forgot to put onions in the soup, thus reducing the menu cost!



Among those alumni attending the 1990 Manawatu reunion were Rusty Firth, Ian Eva and Mike Hare.

Bledisloe Medal Citation 1990

Robert Peter Pottinger



and enthusiasm. The Pottinger enthusiasm and energy spilled over to all facets of his College life. It was obvious in the lecture room where as an assistant lecturer in Agricultural Zoology he learnt how to get Diploma students to open their eyes to the science of, and understand the need for, effective insect pest control in the field. His attributes in other phases of College life were no more readily shown than by his athletic prowess and his growing organisational skills as a very active member of the Students' Association.

In 1961 he won a Commonwealth Scholarship which enabled him to undertake doctoral studies at McGill University, Canada. There, under the supervision of Drs Ed Le Roux and Frank Morrison, he completed a major research study on the ecology and population dynamics of the apple leaf miner. Any population study in depth is a daunting project because of massive collection of data, but Ed Le Roux's reading of Peter Pottinger's potential was correct and the result was one of the fullest and best population studies of an insect pest then known.

Dr Pottinger returned to Lincoln as assistant lecturer in 1965, and in the short space of six years reached the status of Reader in Entomology. At Lincoln he taught introductory and applied entomology to diploma and degree classes and advanced courses in morphology, soil zoology, ecology and agricultural entomology. He supervised several doctoral and masterate graduate students, many of whom have advanced to distinguished careers in D.S.I.R. and M.A.F.

Mr Chancellor,

Peter Pottinger's training, both in New Zealand and overseas, emphasising as it did quantitative ecological methods, could not have occurred at a more appropriate time.

Your Excellency, Mr Chancellor, distinguished guests:

Sixty years ago the Governor-General, Lord Bledisloe, visited Canterbury Agricultural College, Lincoln, and endowed a medal to be awarded to a former student who as a result of his training materially assisted farming in New Zealand or otherwise advanced the country's interests. The Bledisloe Medal is Lincoln's premier award.

This year's recipient is Dr Robert Peter Pottinger.

In making this award to Dr Pottinger this University acknowledges an outstanding contribution to New Zealand's primary production sector.

Born on the West Coast where he received his primary and secondary education Peter Pottinger commenced tertiary studies in 1953 at Canterbury University College, graduating with a B.Sc. degree in

1956, with majors in Zoology and Botany.

Desirous of furthering his education he came to Lincoln where he successfully completed the B.Agr.Sci. in 1958 and a Masters degree with first-class honours in entomology and plant pathology, focusing on the biology and control of the Argentine stem weevil.

This study was instrumental in drawing the attention of grassland farmers and researchers to the significance of this small and then relatively unknown but widespread ryegrass destroyer. While completing his thesis, Peter Pottinger was appointed temporary assistant lecturer joining Mr Lewis Morrison and Mr Gordon Williams in the fledgling Department of Agricultural Zoology. He was also resident tutor in Ivey Hall. At Lincoln College Peter Pottinger quickly achieved a reputation for thoroughness, drive

In the fifties and early sixties it was standard practice for farmers to proof their pastures against grass grub infestation by regularly applying D.D.T. every three years, irrespective of need or consequences. However, Rachel Carson's "Silent Spring" published in the early 1960s, together with pressure from lobby groups, brought about a change in attitude, albeit slowly, which inevitably resulted in Government banning the use of D.D.T. in 1968, and restricting the use of Lindane. The problem was that there were no alternative methods of control to replace insecticides. The result was a major eruption of major pasture pests, the natural enemies of which had been largely killed off by indiscriminate use of insecticides, primarily chlorinated hydrocarbons. The subsequent depredation wrought by grass grub, principally in the South Island, and by black beetle and Australian soldier fly in the North Island, highlighted the need to find alternative methods of control. Damage by the soldier fly was estimated to cost the country \$100 m (in current dollar values).

What New Zealand needed was an able and industrious agricultural entomologist who, with strong leadership qualities could head a team of scientists and technicians forming a research network throughout the country; someone with skills in integrated pest management systems based on quantitative biological data. We had such a person in Peter Pottinger. Leaving Lincoln College for Ruakura in 1975 Dr Pottinger became National Co-ordinator, Pasture Pest Research and found himself leading a team of scientists, many of whom were his former students. He quickly established an amiable and effective rapport with staff in whom he has always taken a personal interest, giving them support and encouragement as well as strong leadership.

The pest epidemic meant answers were needed urgently. This called for some shrewd intuition mixed with some management systems used by farmers prior to the advent of D.D.T. to manipulate pest populations, but with more sophistication, using population data. Integrated pest management systems were the result of several years intensive experimentation. Peter Pottinger's work did not stop there. Being an enthusiastic applied entomologist, Dr Pottinger took the results of scientific investigation back to those on the land.

Speaking at up to 15 field days a year, he explained the story of the major insect pests and how to combat them. He is a pasture man at heart and is greatly respected by all for his work, especially on Argentine stem weevil, grass grub and porina. His knowledge of the whole gamut of farm pests was not book-learning, but came from an amalgam of his own personal experiences and those of his research team.

These he published in a best seller, the Pasture Renovation Handbook, which explained in lay language the concept and practice of integrated pest management.

The pest control package which evolved included management practices such as mob grazing at defined stocking rates, the use of certain pasture species, cultivation, and the timely application of environmentally acceptable insecticides. These now form a matrix of cost effective and environmentally acceptable methods for the control of many pests of agriculture and horticulture. Significant among these were strategies for the control of the lucerne flea on clover in North Island pastures and cattle ticks on northern deer farms.

Dr Pottinger was in the vanguard of the evolution toward integrated pest management. From his position as a science administrator with specific responsibilities for the national co-ordination of pest research and key participant in the extension process, he was pivotal to the success of scientific endeavours and acceptance by practitioners in the field of horticultural, agricultural and entomological research which when applied in the field saves the country tens, probably hundreds of millions of dollars.

Peter Pottinger who is currently Leader of the Plant Protection Group, MAF Technology at Ruakura, has authored or co-authored 110 scientific publications.

As an initiator and enthusiastic facilitator he has been and is associated with many other important research projects. These include the significance of endophyte in resistance to Argentine stem weevil, the role earthworms play in increasing productivity and the significance of nematodes in reducing pasture production. The tasks set and the results obtained could only have been met and achieved by a person of Peter Pottinger's calibre, enthusiasm and breadth of knowledge. Plant protection research established by Dr Pottinger at Ruakura and through M.A.F. is now internationally recognised and has resulted in an extensive consultancy overseas.

Mr Chancellor,
It is appropriate that in 1990 this University, whose motto is Science and Industry with Integrity, should acknowledge the significant work of one her sons; a scientist, a teacher, an administrator and extension worker.

This University is proud to add the name of Dr Robert Peter Pottinger to the distinguished list of Bledisloe Medallists.

Class Reunions

1969 VFM

The 1969 VFM group held a reunion in Palmerston North. Murray Ellis reports that the group in 1969 was a large one with 63 male students. Some 25 attended the reunion in Palmerston North along with partners. The programme revolved around the Coachman Inn near City Centre with most arriving Friday night and Saturday morning.

Saturday was spent sightseeing around Palmerston North and Manawatu (women in the shops, guys in the pub!), warming up for the big function, held at the Coachman, on Saturday evening.

Local identity, FM consultant and author Rusty Firth delivered the 'key note' address at the dinner followed by rusty guitar strings and even

rustier voices trying to sing old songs, the words of which nobody could remember.

Vast quantities of amber refreshments were quaffed with traditional gusto amidst continuous chatter. It wasn't until the morning that the realisation came that the body seems to react more to a hard night 20 years on!



Back row

Ted Marshall (Rotorua), John Walter (Hamilton), Bernard Card (Wellington), John Darragh (Te Awamutu), Trevor Lyall (Wellington).

Third Row

Murray Ellis (Christchurch), Alan Stewart (Christchurch), John Bowden (Tauranga), Warwick Hartstone (Hamilton), Guy Scholefield (Warkworth), Andy Welch (Reporoa), Jim Veitch (Taupo), Andy Harris (Harihari), Steve Allison (Wellington).

Second Row

Barry Holdaway (Blenheim), Barry Brook (Hastings), Alan Sewell (Christchurch), Dave Houghton (Auckland), Ron Thomas (Napier), Trevor Walton (Wellington), Don Prouting (Peel Forest), Rob Ripley (Auckland), Don Fraser (Cambridge), Chris Leahy (Palmerston North), John Collie (Hokitika).

1952 VFM

The 1952 VFM'ers held a very successful re-union during Queen's Birthday weekend.

The gathering which was organised and hosted by the four Northern-most members of the group Tony Eastgate, John Nicholls and Gordon Robertson of Whangarei and Clyde Guest of Kaikohe, was held at Ruakaka, Whangarei. Also in attendance with their partners were Don Cameron, Hutt Valley, Pete Tierney, Tauranga, John Hotop, Hamilton, Bob Bakewell, Te Kuiti, Pat Ryan, Greytown, Ron Simpson, Te Awamutu and David Boyd, Tauranga.

Apart from the long hours of happy reminiscences over the group's many famous (and quite a few infamous) achievements at the College, the golfing members found time to enjoy the hospitality at the local Club, while non golfers spent a very interesting afternoon sightseeing in and around the Marsden Point Oil Refinery area.

The official dinner was held at a local restaurant and was a great success. During the evening toasts were proposed to 'Lincoln College' and to 'Absent Friends'.

It was approximately 10 years since the group last met at Taupo, but the success of the Ruakaka reunion prompted the group to agree to hold the next get-together in 3 years time, with Dave Boyd (Tauranga) being delegated the important task of locating a suitable venue 'somewhere in the central North Island'.

With all members of the 1952 group now being just on, or over '60 not out', it was pleasing to see that all had weathered the years very well and looked in remarkably fine fettle. Apologies were received from Neville McFadden, Ashburton, and Ted Boothby, England.



Back row from left: R.C. Guest, D.F. Boyd, P.J. Ryan, P.E. Tierney, G. S. Robertson, R.J. Simpson, D.D. Cameron.
Front row: A.G. Eastgate, J.H. Nicholls, J. Hotop, R.B. Bakewell.

1975 VFM

Allan Kinnis reports on the second 1975 VFM reunion at Tauranga on 15 - 17 June 1990.

“Present at the reunion were Mike and Jos Brown, Bryan and Judy Gavin, Phillip and Robyn Holt, Terry and Marina Jones, Allan Kinnis, Doug and Doreen McPhail, David and Vicki Parker, Murray and Doreen Peter, Ross and Ann Pridham, Bruce and Annette Stuart, Liz and Ian Turnbull as well as Dip.Ag. old students Don and Cheryl Ford, Malcolm and Joy Garvan, Rens and Annette Groot, Harvey and Vicki Reid.

“The Friday evening commenced with dinner followed by a ‘roll call’ then

an excellent update on Lincoln University given by the guest speaker, Dougal Robertson. Things have definitely changed at Lincoln over the past 15 years. The evening developed into non-stop reminiscing on Lincoln days. Everyone was still in good form for the 7 a.m. start with a walk from the hotel to Tauranga wharf to board the ‘Kiwicat’ for a harbour cruise and champagne breakfast. After this everyone boarded a bus for a tour of the district which included the Bay of Plenty Polytechnic, including their Agriculture Centre and recently purchased dairy farm, a late lunch at ‘Kiwifruit Country’ then Colin Armer’s 100 cow dairy farm at Te Puke with a 50 aside herringbone shed.

“Saturday night had a theme ‘Hard-Up’ with everyone dressing appropriately for the occasion. In addition 1973/74 Dip.Ag. people were invited with four turning up. After a buffet dinner there was dancing and yarning which continued well into the small hours and attendance at breakfast was a bit slow on Sunday morning.

“Sunday saw everyone depart for Plummers Point Holiday Park, half an hour north of Tauranga, for a BBQ lunch. Cricket, volleyball and hot swims were enjoyed by all. A general consensus was reached to stage another reunion in five year’s time. Liz Turnbull and Murray Peter are to be the convenors for 1995. They will consult everybody as to whether the venue should be in the South Island or overseas.”



NED GLANVILLE REMEMBERS

Edward (Ned) Brough Glanville (Dip. Ag. 1923-25), now in his 90th year has written about his life and career in agriculture, events of life before, as he put it 'my memory lets me down.' The Association is pleased to publish the following edited account.

I was born on 7th April, 1901, in the school house at Springfield, Canterbury, where my father (James Edward Glanville) was Headmaster of the primary school. He was later transferred to Woodend Primary School where I commenced my education and later was a pupil at Elmwood Primary School in Christchurch. After passing through the standard classes at Elmwood, I attended Christchurch Boys High School, leaving at the end of 1917 to start a farming career as a farm cadet with an uncle on his Hawkes Bay farm. After about three years with my uncle I returned to Canterbury to take a job on an arable farm to gain experience in cropping procedures. It was while I was working on the Canterbury farm that I made up my mind that it was necessary for me to improve my agricultural knowledge if I wanted to become more than a farm labourer, so I enrolled as a student at Lincoln College and was accepted to take the three year diploma course. I commenced the course in January 1923 and graduated in December 1925, having passed all the necessary exams over the three years, gaining the Lincoln Diploma of Agriculture.

Lincoln

I found it quite a struggle to find the money required to pay for the three years tuition, which amounted to fifty pounds for the first and second years, reduced to twenty five pounds for the third year, quite a small amount to pay compared with today's cost for tuition fees. I had not been able to

save very much money during the six years I was working on farms before entering Lincoln, as I only received ten shillings a week in my first year as a cadet which increased slightly each year reaching thirty shillings a week in my sixth year. I was fortunate that my mother came to my assistance and helped me finance the course, but it wasn't easy for her as my father died in 1916 when I was fifteen. After my father died my mother took up primary school teaching again (she was a teacher before her marriage) to keep the wolf from the door and help with my education. I have much to thank her for the help and encouragement she gave me in my early years, which no doubt was responsible for my eventual progress and success in the agricultural field during the later years of my working life. To gain some money to help pay my fees I denied myself of taking the College term holidays and worked on the College farm during these periods at three pounds a week and was responsible for looking after the draught horses and allocating their work to the few students who remained at the College during the holidays, while the farm manager took his holidays. I did however take the Christmas periods each year which I spent with my mother in Christchurch.

Not only did I find it hard to finance the course; I also had difficulty in mastering the theoretical side of the course after being away from school for six years. I had to work very hard to absorb the lecture material as it was necessary to pass all the subjects comprising the three year course to gain the Diploma. In this respect I was very fortunate to share a study with the late Jack Bell who joined the Department of Agriculture as an Instructor in Agriculture after qualifying at Lincoln, retiring at the same time as I did. Jack was a very studious student and helped me no end to decipher lecture notes and I have a lot to thank him for. We

worked together very well and when we were presented with our Diploma Certificates at the end of the course in 1925, Jack was also presented with the 'Gold Medal', awarded to the student gaining top marks over the three year course in theory and I was fortunate enough to gain the 'Sidey' Challenge medal awarded to the student placed top in practical work. To my surprise I was also awarded a Certificate stating that I was a suitable person to sit an exam to drive a steam driven traction engine having done the necessary period at Lincoln stoking the traction engine there as a preliminary to sitting the exam. Needless to say I did not sit the exam as I could see I would not have any use for a licence of this sort.

During the period I was a student at Lincoln the yearly intake of students was sixteen or seventeen with a total number of fifty, a different position today when up to two thousand students can be catered for. Students did all the necessary farm work - the first year students worked with the third years half a day on the farm and the other half attending lectures while students in their second year worked on the farm while the first and third year were attending lectures. I would like to record that the three years I spent at Lincoln were a most interesting and rewarding experience. One made life-long friends with the close contact one had with all the students particularly those in the same year. The knowledge gained there was most valuable and enabled me to obtain better positions in the years ahead and made my life working in the agricultural field really worthwhile.

On leaving Lincoln College I worked for the late Major Hutton on his 'Bangor' farm at Darfield. While with Major Hutton I looked after a ewe flock and also gained experience in tractor work preparing land for fodder crops such as rape, turnips

and swedes, while a large acreage of land was sown in grain crops such as wheat and oats. Oats were a very necessary crop on this farm as they were required for feeding the many polo ponies acquired by the Major who was a very keen polo player.

Hawkes Bay

After a little over a year at 'Bangor' I left to take a position at 'Oruawharo' station at Takapau, Hawkes Bay, to take charge of the cropping side of the station. The job consisted of preparing the land and sowing a large acreage of fodder crops such as rape for fattening lambs, swedes for wintering hoggets, while an area of oats was grown for feeding the horse teams and the station hacks. I had an area of lucerne established which proved invaluable for the production of hay and grazing during the very dry periods experienced on the Takapau Plains. While at the station I was responsible for instigating the top-dressing of suitable grassed areas which allowed more lambs to be sold fat off their mothers, with the idea of reducing the area of fattening crops being grown. The experimental areas of grassland treated with phosphatic fertiliser were so successful in improving the condition of the stock grazing them and the increased number of fat lambs sold off their mothers indicated that the area normally sown in rape could be greatly reduced. This was done and the area of pasture top-dressed was increased and produced very profitable results. In the early stages the fertiliser was applied by a horse drawn machine and much of it was applied by hand. However it was soon found that the results from top-dressing were so successful that the top-dressing programme was gradually increased over the years and application of the fertiliser by air was introduced and I understand that still applies today.

In addition to growing the crops mentioned it was customary to follow the rape crops with new grass. This gave me a chance to ensure that the grass and clover mixture sown contained certified seed - a practice not always carried out in the twenties. Also the use of suitable fertiliser when sowing grass seed was often neglected. However this was not a problem at 'Oruawharo' which resulted in the establishment of first class high producing pastures which responded magnificently later to topdressing.

While at 'Oruawharo' I witnessed the changeover from draught horses to tractors. The experience I gained at 'Bangor' in the handling and maintenance of tractors was most valuable in assisting with the changeover.

However my most exciting and rewarding experience while at 'Oruawharo' was meeting my future wife (Thyra Johnson). After a two year engagement we were married in the Anglican Church at Takapau on 7th April 1931 (my 30th birthday) and we are now looking forward to celebrating our Diamond Wedding Anniversary on 7th April 1991 on my 90th birthday. We only had one child, a daughter, Betty, who was born in 1933. We unfortunately lost her in 1970. She was the victim of multiple sclerosis. We found it hard to understand why she should have been stricken with this crippling complaint, being such a very healthy, strong girl in her childhood.

Instructor in Agriculture

In June 1928 I left 'Oruawharo' having accepted a position as Assistant Instructor in Agriculture with the then Fields Division of the Department of Agriculture at Whangarei. Here I joined the late Charles Hamblyn as his assistant, at a commencing salary of two hundred and fifty nine pounds per annum.

We had to serve a large number of farmers over a vast area of farm land extending from Warkworth in the South to the top of the North Island. Travelling from farm to farm was slow and arduous in those days. There were very few metal roads and much of my transport had to be done on horse back as most farms had only clay road access.

My first impression of the farming methods in the North struck me as being very primitive, compared with the farm practices I was accustomed to on the farms I had worked on in Canterbury and Hawkes Bay. The pastures generally were poor, no doubt due to the lack of topdressing which in turn was due mainly to the difficulty and cost of transporting fertiliser to farms on the clay roads, which were often impassable for wheel traffic during the winter, and even in the summer months when heavy rain fell. There were however a few farmers who did a little topdressing using small quantities of 'basic slag' on selected areas of pasture as this was about the only fertiliser known to farmers in the North during the nineteen twenties.

It was obvious that we had to demonstrate to the farmers the value of improving their pastures by using the correct grass seed mixtures followed by the use of a suitable annual application of fertiliser to maintain pastures.

Much of the land in North Auckland was underdeveloped - the gum-land which was originally covered in Kauri forest, the iron stone areas in the Bay of Islands and the consolidated sand country along the West Coast of the Hobson Country, while there were quite a number of reclaimed tidal flats throughout the area waiting development. There were also quite a number of very fertile areas scattered, particularly throughout the Whangarei and Bay of Islands Counties, such as the rich volcanic soils which were easier to farm and

were covered with quite good high producing pastures. Being light in texture these volcanic soils became very dry over the summer months resulting in a short growing season. The pastures on these volcanic soils fortunately contained a fair proportion of Paspalum which was a very valuable pasture species to keep production up over the summer months in the North as it flourished when conditions were dry. Paspalum dominant pastures were prevalent throughout North Auckland, but generally consisted of a low producing, tight, root bound sward, but were later improved with surface cultivation and the introduction of a ryegrass white clover mixture into the pasture sward, followed by annual topdressing with phosphate and lime, where needed. This gave a year round, high producing pasture.

To demonstrate this to farmers in a practical way I established a series of experimental plots covering the different soil types. These plots were set out on existing pasture swards and included the use of super-phosphate, rock-phosphate, potassium and nitrogen with and without lime. Another set of plots using the same fertiliser applications were sown down with certified and uncertified grass seed mixtures. All fertiliser plots were maintained with an annual application of their respective fertilisers and lime and when established were used for demonstration purposes. We held regular field days for groups of farmers on these plots in each district and from the response shown from the different treatments we were able to convince farmers in a practical way that their pastures were capable of being much more productive.

Farmers responded well to the advice on pasture improvements and the use of phosphate and lime very soon started to increase. Fortunately roads in the North were receiving more attention each year, and this assisted tremendously in transporting

fertiliser and lime to farmers throughout North Auckland.

In addition to the time I spent with farmers in experimental and advisory work I was engaged in the early investigation of methods to establish productive pastures on the problem gum-land soil type which was prevalent throughout North Auckland. Prior to my starting on this work the Department of Agriculture had already commenced the development of an experimental and demonstration farm on an area of this uninviting soil type at Puwera, seven miles from Whangarei. A large enough area was eventually grassed to enable a dairy herd to be acquired and milked on the resultant pasture sward. At Puwera it was found that by using a certified ryegrass and clover seed mixture with the addition of paspalum in conjunction with a heavy dressing of lime and super-phosphate applied at the time of sowing down, a reasonable pasture sward could be obtained, but it was necessary to follow with a regular liberal annual application of lime and super-phosphate each autumn.

In addition to the work done at Puwera, experimental plots were also laid down throughout the area on private farms to demonstrate the methods which were successful at Puwera.

Full details of the work done and the results obtained involving developing gum-land, is recorded in an article I wrote in the 1930s and was published in the Journal of Agriculture.

Further to the work done on the gum-land, I was also involved in the original research on grassing the iron-stone land in the Bay of Islands at Waipapa, three miles from Keri Keri. Here we had a very light soil of volcanic origin which was riddled with iron-stone pellets and was found to be cobalt deficient. A small area which was covered with scrub and gorse was taken over from the Lands

Department, cleared, ploughed and after working down was sown to permanent pasture. On this area a number of fertiliser experimental plots were established. The area was fenced and grazed by sheep brought in by a neighbouring farmer. It was soon found that cobalt sulphate had to be used to keep the stock healthy, as well as lime.

Based on the results of the work done on this experimental block the Lands Department went ahead with the development of the area adjacent to Waipapa and was later settled by ballot.

Dargaville

In January 1933 I was transferred to Dargaville and promoted from assistant to Instructor in agriculture.

A pleasing feature of this transfer was that I was provided with a departmental motor car, a 1929 Austin Tourer. The availability of a car was most essential for the work I had ahead of me. I found it a most useful and valuable asset and was certainly a much improved method of transport from what I was used to, making conditions a lot easier for me to carry out the many duties I had to attend to over such a large district.

At this time the then Coates Government launched a scheme throughout the Country known as The Small Farm Plan Scheme which was designed to help find employment for some of the many thousands of unemployed.

It was decided that quite a number of small farms could be developed on a large tract of undeveloped consolidated sand country situated along the West Coast adjacent to Dargaville and Te Kopuru. The development of this country into small farms was the main reason for my transfer to Dargaville and I had to immediately take charge and get the development underway.

It was necessary to clear and plough the land before working down to a seed bed and sowing to grass. Arrangements were made to have this work done by contract and on completion the area was subdivided into twenty acre farmlets. The subdivision and internal fencing was done by the unemployed applicants who were eventually allocated a farmlet. The development of this consolidated sand country did not present any difficulties. It was easy to plough and work down for sowing to grass with the resultant pasture being most successful and thrived on an annual dressing of super-phosphate, (no lime was required) but they were inclined to dry up during the summer months.

In addition to the grassing and fencing of these farmlets (33 in all, 21 at Wilson's Block near Dargaville and 12 at Bassett's Block at Te Kopuru) it was also necessary to provide buildings on each one. This was successfully done by letting a contract to a local builder to erect a small cottage and a milking shed on each unit. To assist the builder to speed up the building programme a team of handymen was selected from the prospective settlers with some experience in concrete work, were given the job of laying the concrete floors in the milking sheds and yards after the boxing was put in place by the builder. This reduced building costs. Stock had to be provided to each settler and for a start they were each supplied with six to eight cows.

While this development was going on the unemployed men engaged on the work preparing the farmlets lived under canvas and were paid a small allowance from the unemployment fund which was established during the recession. After settlement and when the cows came into production the unemployment benefit was gradually decreased and ultimately ceased when the cows came into full production. The settlers on these farmlets soon became self supporting,

but in later years the farmlets were enlarged by amalgamating two or three of them resulting in reasonably sized farms. I would like to record that during this recession period I was also a victim of two ten percent salary cuts which Public Servants all received at that time. I remember receiving only nine pounds thirteen shillings and four pence each half month. After paying thirty shillings a week rent we had very little to live on, but as everything was so cheap we managed to get by.

While stationed at Dargaville I took over the Chairmanship of the Northern Wairoa Experimental and Demonstration Farm.

Electricity

The great event taking place at this time was the reticulation of electricity throughout the North and I remember the power being switched on at Dargaville in September 1936. It wasn't long before the farming areas were coupled up and the reliable Anderson and Lister petrol engines, which had been so valuable over the years to operate the milking and shearing plants discarded and replaced with electric motors.

Early in 1937 I was transferred back to Whangarei as Instructor in Agriculture to replace the late Charles Hamblyn who was appointed Field Superintendent at Palmerston North. I had to take over the experimental and advisory work and extend this work on more farms in the northern part of the district, particularly in the far north. I also became interested in developing tidal flat areas of which there were many throughout the north which had been created through stop-banking. The generous use of strawberry clover in the grass seed mixture was successful. This clover species was resistant to salt which was found in large quantities in these soils after stop-banking and draining.

The first Young Farmers Clubs were formed throughout the north during this period and it took up a lot of my time getting them established and running smoothly. The time spent with Young Farmers Clubs entailed a considerable amount of night work attending club meetings and giving lectures.

In 1939 we were thrust into World War II and it soon became necessary to ration our supplies of meat, butter and petrol while farmers had also to face fertiliser rationing. Fertiliser Ration Committees were set up throughout the country to do this unpleasant work and I was attached to the North Auckland Committee which adjudicated on the applications sent in by farmers seeking a ration of fertiliser. I had to write articles on various agricultural subjects for publication in the Journal of Agriculture, and prepare material for radio broadcasts.

The Department at this time was called on to produce large quantities of vegetables for the New Zealand and United States armed forces stationed in New Zealand and the Islands. This is when I received notice that I was to be transferred to Auckland to become involved in this huge assignment.

Auckland

I shifted to Auckland in July, 1941 and was appointed Acting Field Superintendent relieving the late Jim Smith who was transferred to Head Office, Wellington to take overall charge of what was known as S.V.P. (Services Vegetable Production) a huge undertaking.

It is interesting to note that while I was stationed at Whangarei I purchased a 1938 Ford V8 Motor Car for three hundred and twenty pounds, which I used on my field work there and before I left Whangarei for Auckland I sold it for three hundred and fifty pounds, even

after it had clocked 40 000 miles. At this time cars were very scarce especially, V8 Fords and Chevrolet as they were in great demand by the Armed Forces. However the money I obtained from the sale of the car was used to purchase a building section in Auckland on which I had my first home erected for a cost of one thousand pounds.

The main activity I was engaged in while stationed at Auckland was the establishment and supervision of the S.V.P. projects developed throughout the North Auckland, Auckland and South Auckland Provinces. The projects, 13 in all (covering a total area of approximately 3 000 acres) were situated at Kaikohe Whangarei, Belmont, Mangere, Papatoetoe, Rukuhia, Ruakura, Koromatua, Thames, Tauranga, Rotorua, Patumahoe and Onewhero. The largest, Patumahoe, of 1 000 acres was divided into four units with a manager placed on each to supervise the operations.

The land selected for this purpose were suitable farms obtained from the owners and taken over after negotiation. Leases were drawn up for the owners to receive rent for the use of their properties and the Department of Agriculture agreed to restore the pastures and renew any fencing removed or damaged. The owners of the properties taken over mostly continued to occupy their houses and were given work in the project. The large Patumahoe project was built up by taking over several properties, hence the necessity to divide it into four units with a manager on each unit to ensure efficient operations were able to be carried out on such a large area under cultivation.

With the selection and access to the land being completed the next step was to obtain tractors and equipment, also buildings had to be erected to house permanent workers and packing and storage sheds were

also required, particularly on the larger projects such as Patumahoe. The building programme was carried out by the Public Works Department. Being a war effort this work took priority and the buildings we required were erected quickly.

The purchase of some 99 tractors and cultivation implements had to receive immediate attention so that the existing grassed areas on the properties taken over could be ploughed and worked down to a seed bed without delay. A number of the smaller tractors were fitted with inter-row cultivation equipment. Implements such as ploughs, disc harrows, cultivators, tyne harrows, cambridge rollers and seed drills all had to be obtained and allocated to the various projects in as short a time as possible so that work on the projects could commence immediately. In addition quantities of hand gardening tools had to be purchased and allocated to each project.

The first six months were pretty hectic, but by hard work of all concerned and good weather conditions we were able to get our first crops harvested and away to the army camps. These first crops were mainly lettuce, green peas, beans and tomatoes while in the next few months tons of cabbage and cauliflower started to flow off the projects. After this initial early rush to get vegetables growing and supplied to the army things quietened down a bit and we were able to plan ahead to keep a continuity of supply to both the American and New Zealand armies according to their requirements.

Harvesting the crops, particularly those which matured over the summer months, was done by university students who were man-powered to carry out this work over their Christmas holiday period. While engaged on this work they lived in tents, which were supplied

and erected by the Army. To cater for these workers we had temporary kitchens erected and the Army personal supplied the cooks and the rations necessary to feed the large number of casual hands in residence during the summer months at the height of the harvesting season.

These projects were kept in operation until the end of the war when the properties had to be restored to their original state to the satisfaction of the owners. This entailed much work as all the properties had to be sown down to grass and fencing replaced. All the equipment had to be disposed of, while the buildings erected by the Department were either sold for removal or demolished.

Wellington

On completion of the S.V.P. restoration work, I was transferred to Wellington and appointed Farm Superintendent, later changed to Chief Advisory Officer (Farms), a newly created position at Head Office with the same grading as a Field Superintendent. The duties were many and varied, but consisted mainly of giving practical assistance to the superintendents of the Departments Experiment and Research Stations. The position entailed a considerable amount of travelling as the stations were located from Hamilton in the North to Dunedin in the South. I was also appointed the Department of Agriculture representative on the Land Settlement Board, the Board of Maori Affairs, and the Wairarapa Agriculture Training Farm which meant attending their regular monthly meetings. I had to assist the officers of the Public Trust Office connected with Smedley Training Farm at times and gave similar assistance to the Salvation Army in connection with their Training Farm at Putaruru. There was supervisory work to be done at Flock House, Bulls and on the Phormium Tenax

Development Project being carried out on the Moutoa Swamp, between Shannon and Foxton which I visited each month.

Much work had to be done on Flock House Station, reorganising the property, which was considered too large, into suitable sized areas so that more intensive instruction could be given on all types of farming. The area retained consisted of 2500 acres while the remaining area was taken over by the Lands and Survey Department and developed into suitable sized farms for the settlement of returned servicemen. The area retained was subdivided into six units, a dairy and pig unit, a fat lamb unit, a cropping unit, a breeding ewe and cattle unit, a horticulture unit and a unit devoted to breeding Polled Angus stud cattle. All the work in connection with establishing these units was done by the trainees. It provided excellent training and took some years to complete. Ultimately a manager was appointed to each unit. This scheme resulted in the trainees receiving much more intensive training.

Special instruction on tractor driving and maintenance, shearing, butchering, carpentry, and the rearing of poultry was given to trainees by qualified instructors. Also a programme of lectures on all agricultural subjects was an essential part of the Flock House course and after the course was completed (two years) those trainees who gained the required number of marks were awarded a Certificate of Agriculture.

At Moutoa an area of some 3 000 acres was maintained in Phormium Tenax, the fibre of which was essential during the war years for supply to the Foxton factory for the manufacture of twine, ropes and woolpacks. An area of some 200 acres was replanted each year and up to 2 000 wethers were brought in each year by the Lands Department to graze the grass growth which had

to be controlled to prevent the Phormium plants being smothered by the strong grass growth which occurred on this fertile swamp land. After the war the Foxton mill used the fibre for the manufacture of carpets and woolpacks for a few years. Ultimately in the 1960s the mill ceased to operate, the Phormium supply diminished and the Moutoa Swamp was further drained and developed into dairy farms by the Lands Department and settled.

I was associated with establishing the Invermay Research Station, which was established to investigate problems being experienced by farmers in Otago and Southland. An area of land adjacent to Mosgiel which had been developed for settling Returned Servicemen from World War II was allocated to the Department of Ag. for this purpose. I assisted the late George Holmes (the first Superintendent of the Station) to have suitable farm buildings erected such as a shearing shed, sheep and cattle yards, sheds for housing implements and storing fertilisers etc. The station needed roading to service the various blocks and these had to be planned and constructed. The administration and laboratory facilities were housed in buildings taken over from the air force base at Mosgiel as a temporary measure until a permanent building could be erected on the station.

In 1953 the Field Superintendent, Christchurch, (the late Wattie Leitch) died suddenly and I was sent there to fill this position, until a permanent appointment could be made. While I was Acting Field Superintendent I still travelled back to Wellington quite often to attend to any urgent work and to attend the monthly meeting of the Lands Settlement Board. After six months, I returned to Wellington.

Another interesting and pleasant duty was to escort visiting Agriculture Missions on tours of New Zealand

farming areas. On these tours, visits to various types of farms were arranged to enable demonstration and examination of the different New Zealand farming techniques. The visitors were also taken and shown the working of our dairy factories and freezing works while visits to our research stations were also included in the itineraries. I accompanied groups from Australia, South America, Pakistan, Nepal, India, China and I was with a Russian delegation for five weeks.

While attached to Head Office I worked under four permanent heads, these being Jim Fawcett, Bob Tennent, Percy Smallfield (all have since passed away) and Noel Webb while my last immediate boss was Jack Woodcock who is now over 90 years of age and is living in Eastbourne, Wellington. I had a very pleasant time working with these officers who all had a clear understanding of the problems one often faced and I found them most considerate and helpful with their valuable advice which they had no hesitation in giving.

On the 30th June, 1965 I retired and occupied my time playing bowls, contract bridge and gardening. Looking back over the years I served with the Department of Agriculture I had a most interesting and enjoyable life, especially working with the farmers in North Auckland, but at times I found the work strenuous and demanding, often entailing long working hours, especially during the 1930s recessions, when I was involved in the work connected with the Small Farm Plan and during the war years when we were engaged producing the huge volume of vegetables required for the Armed Forces. The job was made much easier for me as I was working with a team of dedicated men and women connected with the Department of Agriculture who were always available and ready to help when their assistance was needed.

Mr John Ewart Bell Dip.Ag.Cert.Agric. died in Auckland during the year.

Mr Bell was educated at Wellington College and Timaru High School, where he matriculated. Deciding to make a career in agriculture he then took a year off studies to work on a farm for 12 months to get a practical background before taking up a scholarship at Lincoln College in 1923. He completed the Diploma course in 1925 graduating with the College Gold Medal.

Mr Bell's first job was as farm manager at Wellesley College. The two years there must have given him an excellent grounding in managerial skills. In 1927 he was appointed to Fields Division Department, Agriculture, Auckland, as assistant instructor in agriculture. He later was appointed to Pukekohe and then back to Auckland again as senior instructor. During the period 1941-45 he was stationed in Wellington as land utilisation officer.

In 1946 he returned to Auckland as field superintendent and remained there until his retirement 20 years later.

His original district stretched from North Cape to an east-west line south of Taupo but excluding Gisborne. Not only did he have control of Fields Division staff in their advisory capacity but he also had to approve and oversee their experimental work.

Travelling around the district on a regular basis kept Mr Bell closely in touch with his staff and their problems. He also kept himself up to date with new developments in farm practices and the results of trials.

Towards the end of his career with the Department he had a couple of trips to Japan to advise on grassland farming. It is likely he was one of

the early members of New Zealand Institute of Agricultural Science. He was still a member five years ago. He gave papers to New Zealand Weed and Pest Control Society and to grasslands conferences.

Retirement from government service came in 1966. However, he was persuaded to help out with advisory work with the Franklin Farm Improvement Club and this plus golf and gardening kept him occupied. He gave up work when reached the age of 80.

Mrs Maurine Brandford died at Tauramanui on 26 February 1990.



Mrs Brandford (nee Harty) did the Diploma in Horticulture course in 1948-49. She married another Lincoln Alumnus, Ben Brandford and together they worked on Ashley Dene.

After leaving Ashley Dene in 1954 they settled in Tauramanui in the King Country in 1955 and have lived there ever since.

Maurine continued her love of horticulture and gardening and was

for several years custodian of all trees and gardens on the Tauramanui golf course. She was also a keen golfer and took part in several New Zealand Woman's Veterans Golf Tourneys and was a dual winner of the Tauramanui Clubs Grandmothers Cup.

She was on the Tauramanui High School Board of Governors from 1967 to 1976 and was Deputy Chairperson for five years. She was also Convenor of the High School P.T.A. Catering Committee and Convenor of the Tauramanui Rugby Clubs Ladies Committee.

She was just 60 when she died and is survived by her husband Ben, four children and nine grandchildren.

Clifford Vaughan Collister a Senior Computer Consultant with Lincoln University's Centre for Computing and Biometrics, was killed in an avalanche on Mount Olympus in the Craigieburn Range on 11 August, 1990.

He first became a Lincoln staff member in January 1980 when he took up a position as Assistant Computer Programmer.

Cliff had a B.Sc. and M.Sc. in Computer Science from the University of Canterbury and worked at Lincoln on a temporary basis for six months before joining the staff here.

In 1984 he was granted a year's leave without pay and for part of that time he worked as national co-ordinator for computer courses for the national council of YMCA. This involved the planning, co-ordination and running of introductory computer courses throughout the country.

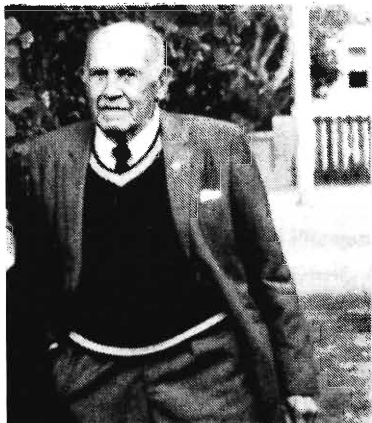
Returning to Lincoln he was appointed Systems Manager with the Centre for Computing and Biometrics then in

early 1987 he spent two months at the University of the South Pacific.

In October 1987 Cliff resigned from Lincoln to set up his own consultancy.

He was employed as a visiting lecturer on limited term contracts until early April 1989 when he commenced a job sharing half-time appointment as a Computer Consultant. He was 36.

Mr Richard (Dick) Alan Fougere Dip. Ag. (1921) died at Hutt Hospital on 14 April, 1990.



Mr Fougere came to Lincoln from his home in the Chatham Islands in 1919 and completed the Diploma Course in 1921. He was a staff member (engineer and farm manager) from 1927 to 1936. In 1932 he married a College secretary, Beryl Rose who died in 1985.

In the 'do it yourself' era of the 1920s, Dick Fougere was 'Mr Fixit'.

Blair records in his 'Life and Work at Canterbury Agricultural college' that Fougere's versatile ability and full understanding of every student whim made him the ideal manager for the farm as it was in his time. Dick Fougere enjoyed an esteem probably not exceeded by any farm manager.

He resigned in 1936 and joined the Valuation Department and retired in 1959. In retirement he spent much

time giving help to the Crippled Children's Society.

Mr Fougere is survived by a daughter and son.

Mr Montague (Montie) Burgoyne Cooke, staff member for 22 years, Honorary Life Member and former secretary of the Association died in Christchurch on August 23, 1990, aged 84 years.



Monte Cooke was born in Timaru in 1906, was educated at Geraldine D.H.S. and entered Lincoln College in 1925. He completed the three year Certificate course and began work as a farm overseer and instructor at Wesley College, Paerata. Following a short period as instructor in agriculture at the Ashburton Technical College, he spent three years on the Wilden Estate, Heriot, before becoming manager of the Seafield irrigation farm in 1932.

Four years later he joined the State Advances Corporation and remained

there for ten years, interrupted by war service and secondment to the Department of Agriculture.

In 1946 he joined the College staff under Professor Hudson and organized many short courses for returned servicemen. When the demand for these courses slackened off he took an ever-increasing interest in the Rural Field Cadet Training Scheme and in the Valuation and Farm Management Course. From 1951 he lectured in Rural Valuation and was appointed Senior Lecturer in 1957. In this capacity he also conducted correspondence courses in Rural Valuation for the New Zealand Institute of Valuers and in addition acted as an examiner. Mr Cooke authored several textbooks published by Lincoln College and contributed articles to the New Zealand Valuers Journal.

His name along with those of Bevin, Flay and Garret will be indelibly printed on the VFM Diploma Course with which he was associated for so many years. His lecturing style was dynamic and unique, his demand for precision unparalleled, as was his organising ability.

As secretary of the Old Student's Association, Montie Cooke served with seven presidents over a thirteen year period. He was elected to Honorary Life Membership in 1983.

Montie Cooke retired from Lincoln College in 1969 and for a period of 17 years until 1986 he practised in association with Robertson Young Telfer as a Registered Valuer in Canterbury, entering full retirement at the age of 80.

As well as being known to literally hundreds of students and staff during his 24 years at Lincoln College, Mr Cooke also rose to achieve considerable eminence in administrative circles. He was a member of the Valuers Registration

Board for twelve years from 1967 and during the period 1974 to 1978 he was an additional member of the Administrative Division of the High Court.

Mr Cooke's service to the valuation profession was outstanding. His interest in the affairs of the New Zealand Institute of Valuers commenced prior to 1938 since he was Secretary of the South Canterbury Sub-branch of the Institute from the inaugural meeting in 1938 to 1946 and subsequently served for many years on the Canterbury/Westland Branch Committee including a term as Branch Chairman. From 1959 until 1967 Mr Cooke was a National Council Member representing the Canterbury/Westland Branch of the NZ Institute of Valuers and was National President of the Institute in 1964 and 1965.

Mr Cooke was a Foundation Member of the Institute in 1948 and was elevated to Fellowship Status in 1949. In 1970 he received the ultimate accolade from the profession when he was unanimously elected a Life Member.

He is survived by his wife Kathleen, a daughter and two sons.

Mr Ernest William Kerr died at Timaru on 6 April 1990. He was a student during 1927-29 completing the Diploma course in Agriculture.

As a student he played rugby alongside Albert Flay and Frank White and captained the second fifteen in 1929. He was also a keen athlete.

He served overseas with the Cavalry during the First World War reaching the rank of Major.

He is survived by his wife and two sons.

Mr Alan Henderson former student (Dip. Ag. 1932-33), Council member and Bledisloe Medallist (1972) died at Winton in June 1990. He was 81.



Mr Henderson was born in East Otago and educated at Otago Boys' High School, Dunedin.

He came to Lincoln in 1932 and excelled academically as well as on the rugby and athletic fields. He worked on farms near Palmerston, Cheviot and Wanaka before purchasing in 1936 a Centre Bush property he later called Nethershiel.

He became a competent and innovative farmer, developing techniques for successful cocksfoot and wheat production.

Mr Henderson was very active in Federated Farmers and represented that body on the Lincoln College Council for 26 years. He was also active in community affairs and served as Director and later Chairman of Southland Farmers Co-operative Association. In 1966 he became the New Zealand Meat Board representative on the Alliance Freezing Company directorate.

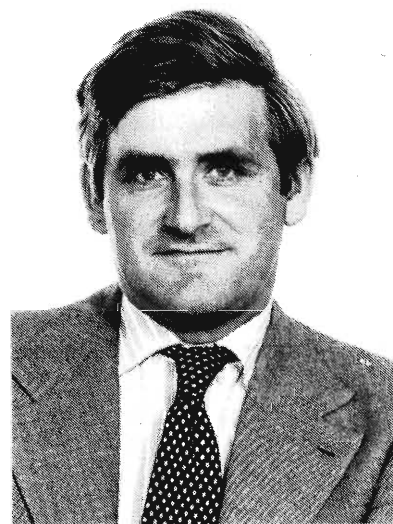
In 1951 he served on the foundation committee of the Lincoln Farmers' Conference. From 1964 and for five

years he served on the New Zealand National Research Advisory Council. In 1970 he changed his Romney and Border Leicester flocks to Coopworths.

Lincoln College recognised Mr Henderson's contribution to the agricultural industry with the award of the Bledisloe Medal in 1972.

Mr Henderson had one son, the late Bill. Mr Henderson is survived by his wife, daughter-in-law Kathie and two grandchildren Mr Alan (Monty) Montgomery died in Australia on 19 May 1990. He was 87. Mr Montgomery completed the B. Ag. degree in 1926 and was a contemporary of R.A. Calder and J.H. Claridge. He worked in War Service land settlement in Victoria, Tasmania, and on King and Flinders Islands. He was a regular attender at reunions and travelled to Lincoln for the Centenary celebrations in 1978.

Mr Bernard Pinney died at Dunrobin Station, Mossburn, on 4 April 1990, after a long illness.



Son of another Lincoln alumnus, Robert Pinney, Bernard came to Lincoln in 1958 and completed the Diploma in Agriculture in 1958. He

was very active in the life of the College and played in the first XI.

Mr Pinney's cricketing talents were first recognized by his inclusion in the Christ's College first XI and continued with his attainment of a cricket blue at Lincoln College and selection for the New Zealand Universities XI in 1959-60.

He was also a keen photographer and trout fisherman.

Bernard and his wife Jenny took over the running of the largely undeveloped 4878 ha Dunrobin Station in 1968, then not much more than a few rough tussock blocks and paddocks.

An article in the Deer Farmer magazine last May, described the station then as being ready for a young man with energy and vision.

Dunrobin today is a testimony to that vision with 141 paddocks, countless kilometres of fencing, almost 1800 ha of improved pasture, 1400 ha of oversown hill country and 104 ha of trees and a network of access roading.

The station's deer block, begun in 1972 and now stocked with high performance red deer and an impressive herd of imported Hungarian red deer, is another testimony to Mr Pinney's vision and foresight and his commitment to the deer industry.

He was a foundation member of the New Zealand Deer Farmers' Association and served that organisation as treasurer and later as president.

In 1981 he led a pioneering delegation to China, and between 1983 and 1985 broke new ground by negotiating the purchase of red deer from Hungary for United Kingdom and New Zealand requirements.

Bernard in the words of Sir Peter Elworthy 'was one of life's enthusiasts, a man of enjoyable personality, a conversationalist and raconteur - a man of an enquiring mind who was always facing challenges and tackling them head on.'

Mr Pinney's intensive involvement in all aspects of agriculture included his appointment to the board of directors of the producer meat exporting company, Primary Producers Co-operative Society, in 1975.

Mr Pinney was awarded a Nuffield Scholarship in 1973, spending six months in Canada, the United States of America, the United Kingdom, France, Germany, Central Asia and the Far East where he studied large scale farm management, animal breeding and landscape conservation.

He will also be remembered as one of the pioneers of the Simmental cattle breed in New Zealand.

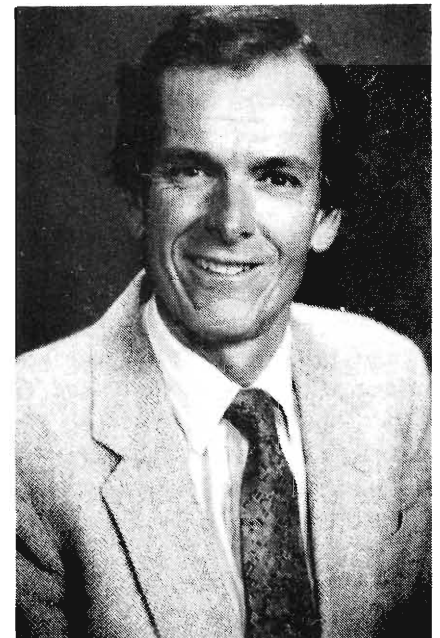
It was his deep love and understanding of the land that led to his passion for conservation and the belief that farmers are stewards of their land for future generations.

This passion was nurtured by his involvement from 1978 to 1984 in the affairs of the Tussock Grasslands and Mountain Lands Institute and in the setting up of a landscape demonstration unit on Dunrobin at the request of the Queen Elizabeth II National Trust in 1985 that included the setting aside of a red tussock reserve on the station.

Mr Pinney's understanding of high country management and conservation was also recognized by the Labour Government which appointed him chairman of Landcorp's Molesworth Station management committee.

Mr Pinney was a prolific writer and accomplished public speaker. He presented numerous papers to farmers conferences and articles to farming-related publications. He represented Federated Farmers on the Lincoln College Council for several years.

Professor Tony Rayner, Lincoln University's Deputy Vice-Chancellor and Professor of Economics, collapsed and died while tramping in the mountains near Wanaka on Friday, 16 February 1990.



Anthony Clement Rayner, aged 51, succeeded Professor Roger Swift as Lincoln's Vice-Principal (position now Deputy Vice-Chancellor) last November and until that promotion he had been Head of Lincoln's Department of Economics and Marketing.

Professor Rayner came to Lincoln in 1985 and took up the Chair in Agricultural Economics formerly occupied by Professor Bruce Ross, who had been appointed Principal (now Vice-Chancellor). Prior to his Lincoln appointment, Professor Rayner held the Chair in Economics at Canterbury University.

Born in the United Kingdom, and married with two sons, Professor Rayner was a Commerce and Social Science graduate of the University of Birmingham, where he specialised in economics and econometrics.

Before coming to New Zealand in 1966 to a senior lectureship in Economics at Canterbury University, Professor Rayner's career had taken him to the Massachusetts Institute of Technology, as a Fulbright Scholar, Nuffield College, Oxford, as a Research Fellow, and the University of Tokyo as a visiting lecturer.

His interest in Japan continued over the years and in 1987 he received a New Zealand-Japan Foundation award which enabled him to visit the University of Tokyo again, plus other Japanese institutions. During his first period in Japan, Professor Rayner was appointed to tutor Crown Prince Akihito in English. On the 1987 return visit Professor Rayner and his wife were invited to dinner and the Imperial Palace by Akihito, who has since become Emperor of Japan.

From Japan he travelled to North America for a period as a visiting professor at the University of British Columbia. Recognising the value of Professor Rayner's contribution to public policy, the Government appointed him a member of the New Zealand Planning Council in 1987. His skill as an economic analyst then made him the choice as convenor of the Council's Economic Monitoring Group. Under his leadership the EMG produced a substantial review of economic re-structuring - 'The Economy in Transition'.

'Professor Rayner had intellectual integrity, rigour, and a kind of bright energy which he focused not just on economics but on all issues that came before the Council, and also on the people around him and their personal interests,' said the Director

of the New Zealand Planning Council, Mr Peter Rankin.

From Senior Lecturer at Canterbury University, Professor Rayner was promoted to Reader in 1969 and appointed to the Chair in Economics in 1972. He was Dean of Canterbury's Commerce Faculty from 1973-76 and National President of the Association of University Teachers from 1981-83.

At Lincoln he was Chairman of the Commerce Board of Studies and a College Council member. Professor Rayner made the move to Lincoln in 1985 seeking the opportunity to work more in the area of applied economics. He was also keen to broaden his work with people outside the academic world. At the time of his appointment to Lincoln, Professor Rayner said that he enjoyed working with people from Ministries, politicians, and others, and was looking forward to contact with the farming community and the producer boards. He said he was keen to get out and talk to people and become involved with agricultural policy at all levels.

Although he spent much of his earlier career teaching econometrics, Professor Rayner's research activities showed his preference for applied economics. Areas of research work included financial markets, agricultural economics, development economics, regional economics, and health economics.

The author and co-author of numerous academic publications, Professor Rayner showed in his writings his enthusiasm for the application of economic theory to everyday life. Published papers covered topics such as the supply curve of working hours; wool prices and the production of synthetics; Premium Bonds and the effect of the prize structure; socio-economic groupings of New Zealand urban areas; the cost of long-stay hospital

care of the dependent elderly; the economic cost to New Zealand of lost production due to alcohol abuse; and the impact of smoking on health care resource use.

In the five years he was on the staff at Lincoln, Professor Rayner's impact was enormous, said the Vice-Chancellor, Professor Bruce Ross.

'He was an outstanding teacher at all levels from undergraduate to postgraduate supervision, but he will be most missed by me personally in the area of academic development and administration,' said Professor Ross. 'The loss of such a talented academic and fine person will be keenly felt by the whole university community.'

Professor Rayner took a particular interest in the supervision of Ph.D. programmes. He had the distinction of supervising the first three doctorates awarded by Canterbury University's Economics Department. One of the successful candidates - David Giles - now holds Professor Rayner's old Chair in Economics at the University of Canterbury.

Outside of his university work Professor Rayner was Chairman of Cashmere School Council 1981-83 and Chairman of Cashmere High School Board of Governors 1988-89. He was also National President of the New Zealand branch of the Australian Agricultural Economics Society, 1987-88.

His recreation interests included a great love of the outdoors - tramping, climbing, and skiing. Professor Rayner is survived by his wife Hilary and sons Nicholas and Julian.

Mr Stephen Hector Saxby died in Wellington in November 1988, aged 81.

Stephen Saxby was born in 1907 in Whataupoko, Gisborne. His second

Christian name was in honour of Sir James Hector, a grandfather on his mother's side and a noted scientist and surveyor, a member of the Royal Society and a Chancellor of the University of New Zealand. Stephen attended Croudson School in Day's Bay from 1917 to 1921 and Christ's College, Christchurch for his secondary education.

He attended Lincoln College in 1926-27 and graduated with the Diploma in Agriculture.

In 1929 he was appointed as an Assistant Agrostologist at the Plant Research Station of D.S.I.R. Palmerston North. His work involved the breeding, selection and evaluation of grassland cultivars and the performance of selections throughout the seed certification plot testing procedure. He was regarded as a leader within the group of scientists involved in this work. He was, however, conscious of the fact that his diploma qualification might not lead to the same promotional prospects as his more qualified colleagues. He was advised to apply for a position as Fields Instructor in the Fields Division of the Department of Agriculture. In this he was successful and he was appointed in 1936 to the Dunedin office where he served the farming community as a competent advisor under Field Superintendent Mr J.W. Woodcock. He was thorough, efficient and dependable in his work taking a particular interest in fostering of the comparatively new Young Farmers' Club organisation. During the early war years he was required to establish and supervise a vegetable project at Outram as required by the SVP (Services Vegetable Project) operated by the Department for supply of vegetables to the Armed Forces. His particular project proved to be an outstanding one.

In 1942 his controlling officer Mr J.W. Woodcock was mobilised for

Army Service at very short notice and Mr Saxby was required to take over this added responsibility as Acting Field Superintendent.

In 1944 Mr Saxby was transferred to the Department of Agriculture Head office in Wellington to take over the supervision of the Services Vegetable Project and a year later was appointed to a specialist position of Agrostologist. This brought him in close touch with advisory staff throughout the country who benefited greatly from his knowledge and experience. He was long regarded as one of New Zealand's leading authorities on pasture species and grassland management. He had already produced the Department bulletin entitled 'Grasses and Clovers of New Zealand' to be followed a year later by "Pasture Production in New Zealand" of which 25 000 copies were sold.

For many years Mr Saxby was secretary of the New Zealand Grasslands Association and in 1956 was elected President. He was responsible for the organisation of the 7th International Grassland Conference held for the first time in New Zealand. This involved several years of planning. In 1957 he became the first recipient of a special Grasslands Association award for his 'Contribution to the betterment of New Zealand's grasslands'.

Other organisations in which he played a leading role were the New Zealand Institute of Turf Culture and was its chairman for a number of years through to his retirement. He was president of the New Zealand Ecological Society in 1957 and 1958 and in 1953 was president of the New Zealand Weed Control Conference.

In 1957 Mr Saxby was appointed Assistant Director of the Extension Division of the Department of Agriculture and in 1963 became its Director by which time it was known as the Farm Advisory Division. He

remained its Director until his retirement in 1966.

Mr Saxby was always in demand as a lecturer on pasture species and their management and he contributed numerous articles to the New Zealand Journal of Agriculture. His bulletins were widely read and became standard textbooks.

In 1953 Mr Saxby spent four months in Pakistan at the request of their government to investigate pasture management in the N.W. Frontier province. This was under the Colombo Plan Scheme.

Mr Saxby was married in 1933 and has two sons living in the Lower Hutt region.

Christopher Falcon Scott died in Timaru in September 1990. He was 76.

Born in Geraldine and educated at Whare Kia-Ora private school there and at Timaru Boys High School, Mr Scott learned to fly with the Otago Aero Club in 1938. Soon after the start of the Second World War he joined the Royal New Zealand Air Force.

In early 1940 he graduated as a sergeant-pilot and went to Britain to be posted to Bomber Command's No. 214 Squadron and after a few operational sorties, joined the command's No. 75 (New Zealand) Squadron.

On 22 December that year while on a raid, his Wellington bomber was damaged and crash-landed and he was taken prisoner-of-war.

He escaped and travelled south across France but was caught by the French police. Eventually he escaped again and he crossed into Spain.

In 1937 Mr Scott took an arts degree course at Canterbury and Otago

universities but the arrival of the war ended that. On being discharged from the RNZAF, he attended Lincoln College doing the 12 weeks' Course in 1945 and the Dip VFM in 1947.

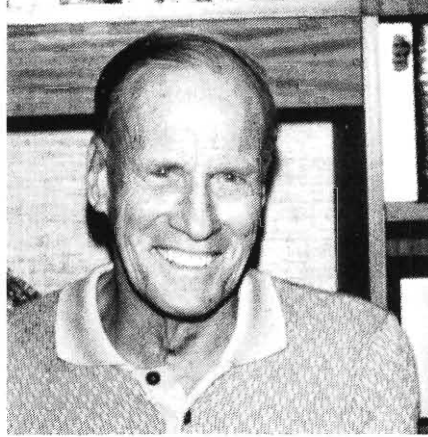
Mr Scott joined the State Advances Corporation and worked in Auckland and Nelson before returning to Timaru.

He started practice as a public valuer and later added insurance work.

He took a keen interest in the South Canterbury branch of the New Zealand Institute of Valuers, as a committee member and president.

He is survived by his wife and one son.

Charles E. Hale died in Australia on



19 August 1990. Mr Hale was a diploma student during 1931-1933. After leaving Lincoln he worked for T.A. Duncan, Taihape and later in North Canterbury.

In 1936 he gave up farming and joined his father's textile importing business. He moved to Brisbane in 1960 to become manager for Tomasettis. He lived in Sydney for three years before his death. He is survived by his widow, a daughter and son.

LINCOLN COLLEGE OLD STUDENTS' ASSOCIATION (INC)
BALANCE SHEET AS AT 31 MARCH 1990

	This year \$	Last year \$
Receipts for the period were:		
Subscriptions - current	20.00	97.41
Subscriptions - arrears	30.48	540.00
	50.48	637.41
Donations	172.50	173.56
Interest from investments	16 408.57	19 744.20
Dividends	6 632.31	5 588.18
Tie sales	1 356.47	1 010.21
Sundries	168.66	4 237.67
Magazine sponsors	6 920.35	2 231.89
Social functions	1 917.26	3 365.06
Badges, Tie tacks etc.	1 730.07	46.58
	35 356.67	37 034.76
Disbursements for the period were:		
Executive Officer	3 960.00	10 000.00
Allowances and travel	2 148.13	719.17
Accounting/Secretarial		1 461.05
Postage and tolls	4 534.73	2 166.908
Stationery and printing newsletter	3 359.01	1 080.10
Insurance and A.C.C. levy		0.62
Printing, typing, posting magazine (note 3)	16 785.01	10 516.79
Presentations, tributes etc.	553.70	44.77
Sundry Social functions	3 210.78	4 234.26
	3 108.83	513.75
	37 660.19	30 737.49
Surplus (Deficit) for the year	-2 303.52	6 297.27

LINCOLN COLLEGE OLD STUDENTS' ASSOCIATION
(INC)
RECONCILIATION OF MEMBERS' FUNDS
FOR THE YEAR ENDING 31 MARCH 1990

Opening Balance	44 483.45
Opening Balance Life Membership	94 666.40
	139 149.85
less deficit for the year	-2 303.52
plus Life Memberships received	12 482.89
plus Sundry Creditors 1989 Adj.	3 000.00
less adj. stock on hand ties and badges	-44.59
Closing Balance	152 284.63
NOTE: Sundry Creditors adjustment.	
VFM Reunion Committee	3 000.00

LINCOLN COLLEGE OLD STUDENTS' ASSOCIATION (INC)
BALANCE SHEET AS AT 31 MARCH 1990

	This year \$	Last year \$
The assets of the Association were:		
Current assets:		
Westpac Banking Corporation		3 003.38
GST	45.52	
Ties	1 960.00	1 924.00
Badges, Tie tacks etc.	445.00	525.59
	2 450.52	5 452.97
Investments:		
As per Schedule	157 587.56	164 470.91
Fixed assets:		
Furniture and equipment	10.00	10.00
Total assets	160 048.08	169 933.88
Assets were represented by:		
Current liabilities:		
Westpac Banking Corporation	1 979.42	
Sundry creditors		25 000.00
	1 979.42	25 000.00
Special funds:		
Diamond Jubilee	402.00	402.00
Hilgendorf Memorial Lecture	116.26	116.26
Scholarship	5 265.77	5 265.77
	5 784.03	5 784.03
Members' funds	152 284.63	139 149.85
Total sources of assets	160 048.08	169 933.88

Report of the Auditor

I have examined the accounts of the Lincoln College Old Students' Association (Inc.) for the year ended 31 March 1990 and have obtained all the information and explanations required.

Because of the nature of the Society's activities it has not been possible to verify all income received - while I have no reason to believe that there has been any unrecorded income of any kind I am unable to confirm this.

Subject to the foregoing, in my opinion the Balance Sheet and Income and Expenditure Account presents a true and fair view of the state of affairs of the Lincoln College Old Students' Association (Inc.) as at 31 March 1990 and of the results of its activities for the year ended on that date.

Signed: P.S. Alexander
 B.Com. A.C.A. Dip.Ag. Dip.V.F.M.
 A.N.Z.I.V. M.N.Z.S.F.M. Reg.Valuer.

LINCOLN COLLEGE OLD STUDENTS' ASSOCIATION (INC)
SCHEDULE OF INVESTMENTS AS AT 31 MARCH 1990

	Maturity Date	Cost \$	Interest %
Debenture stock:			
Barclays N.Z. Limited	23-05-90	5 000.00	17.00
Broadbank Crop Limited	16-02-91	4 500.00	17.00
Canterbury Frozen Meat Co. Limited	31-08-91	3 000.00	16.00
Consumer Finance Corp. Limited	07-11-90	5 000.00	13.00
Consumer Finance Corp. Limited	28-03-91	5 000.00	13.25
Crown Finance Limited	26-03-94	2 876.15	14.15
Christchurch Drainage Board	01-04-90	5 000.00	5.00
Equiticorp Holdings Limited	13-02-92	5 000.00	16.00
Equiticorp Holdings Limited	31-08-92	5 000.00	16.50
Equiticorp Holdings Limited	06-11-02	5 000.00	17.00
Equiticorp Holdings Limited	29-12-92	5 000.00	15.25
General Finance Limited	11-11-95	3 000.00	17.50
National Mutual Finance Limited	28-10-91	5 000.00	13.50
National Mutual Finance Limited	01-09-98	3 000.00	12.50
Nathan Finance Limited	03-03-94	5 000.00	12.00
National Australia Bank	29-12-92	5 000.00	15.25
New Zealand Dairy Board	01-12-90	2 000.00	11.75
New Zealand Government (\$8 000)	15-10-94	7 140.45	14.00
New Zealand Government (\$7 000)	15-10-94	5 995.19	14.00
Smiths City Group Limited	12-09-90	5 000.00	15.00
Smiths City Group Limited	19-10-91	5 000.00	15.50
UDC Group Holdings Limited	21-01-91	5 000.00	15.25
UDC Group Holdings Limited	18-03-93	5 000.00	15.00
UDC Group Holdings Limited	17-12-93	5 000.00	12.50
UDC Group Holdings Limited	31-07-91	10 000.00	15.00
UDC Finance Limited	10-01-94	5 000.00	12.50
Westpac Marchant Finance Limited	09-03-91	5 000.00	17.00
		131 511.79	
Mortgages:			
Frizzell, A.N.	30-11-91	2 000.00	20.00
	22-11-91	2 000.00	14.75
		4 000.00	
<hr/>			
Company/Shares/notes:	Number	Cost	Value
Fletcher Challenge Limited	19791	17 198.87	81 143.10
Steel and Tube New Zealand Limited	4157	3 204.60	5 736.66
Elders Resources NZFF Limited	1336	1 106.00	2 177.68
City Realities Limited	809	566.30	323.60
		22 075.77	89 381.04
Total Investments at 31 March		157 587.56	

LINCOLN COLLEGE OLD STUDENTS' ASSOCIATION (INC.)
STATEMENTS OF ACCOUNTING POLICY AND NOTES TO FINANCIAL STATEMENTS

1. **General Policy:**
These accounts have been prepared according to the New Zealand Society of Accountants general accounting principles appropriate for the measurement and reporting of earnings and financial position for Incorporated Societies.
2. **Subscriptions:**
Subscriptions are included in the accounts as received. Outstanding subscriptions have not been accrued in either period.
3. **Interest:**
Interest is included in the accounts as received. Interest accrued in either period is not included.
The interest and dividends on \$157 587.56 invested gives a return of 14.6%.
4. **Stock:**
Stock is shown at its approximate cost.
5. **Investments:**
Investments are included in the Balance Sheet at cost.
The market value of shares as at 31 March is approximately \$89 381.
The market value of debenture stock is contingent upon the realisation of Equiticorp Holdings Limited and Crown Finance Limited at their book values.
6. **Investment Policy:**
Current investment policy aims to place funds to best advantage in securities that usually meeting the criteria laid down in the Trustee Act 1956 as amended.



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