



Research & Scholarship

Throughout the Cornwall College group

**Research and Scholarship
Report January 2005**

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Research and Scholarship Report January 2005

Arts and Media

Several staff completed MA projects during the summer and autumn of 2004. Others are still involved in postgraduate studies, while some Foundation Degree tutors are commencing or planning to begin their research projects which involve MA proposals. Most of the HE staff are involved in personal work, which have or will result in exhibitions and publications. The overall profile of research and scholarly activity is extremely healthy within the Centre for Arts and Media.

Examples of Research and Scholarship:

Mat Osmond has proposed a negotiated project for the MA Authorial Practice Ghost Writing (I) "Since commencing the MA Authorial Practice at Falmouth College of Arts I have been working on a series of black and white images with the intention of developing them into artist's books. The result is a body of work which has a plethora of possible directions within it.

In order to create both a focus and a structure for developing these ideas into book form Mat is choosing for the first project to work with a short poem by Kathleen Raine called 'The World'. Mat intends to use the poem throughout this project as a reference point for both content and the structure of the books. This poem interests him for several reasons: It is intensely evocative of the experiential quality of fecund, vibrant 'emptiness' that he wishes to explore through his own work. It has a simple but beautifully crafted structure (six words rotated four times in three line stanzas) that uses repetition to tease out and deepen each word's nuance of meaning.

The concepts in the poem are fairly abstract, leaving him free to play with a range of possible visual responses to it, without being tied to a literal or representational interpretation.



Beacon: part of an ongoing series of pieces based on the image of a burning house

The Aims

- o To take an existing working process that relies upon a 'flow of consciousness' imaging process into a new area of development.
- o To experiment with grouping images into books, as a way of deepening and opening out the content of the work
- o To allow the format and structure of the books o unfold the meanings or resonances of the imagery.
- o To reflect on what the central concerns of my work are, and to make them more directly and accessibly communicated."

Mat is a tutor on the FdA Fine Art Practice in the Tamar Building. He is responsible for the popular part time groups.

Dave Wheatcroft is working towards a proposal to work at Lanhydrock House to present video projections within the rooms and spaces representing the stories, personalities and situations of the evacuees of the Second World War. The ideas have been offered to the National Trust and are being considered for a presentation during the summer months 2005. Dave is the Programme Manager for the HND Multimedia Design in the Opie Building and a tutor with The FdA Multimedia Design programme, and is currently directing video productions for the college with his students.



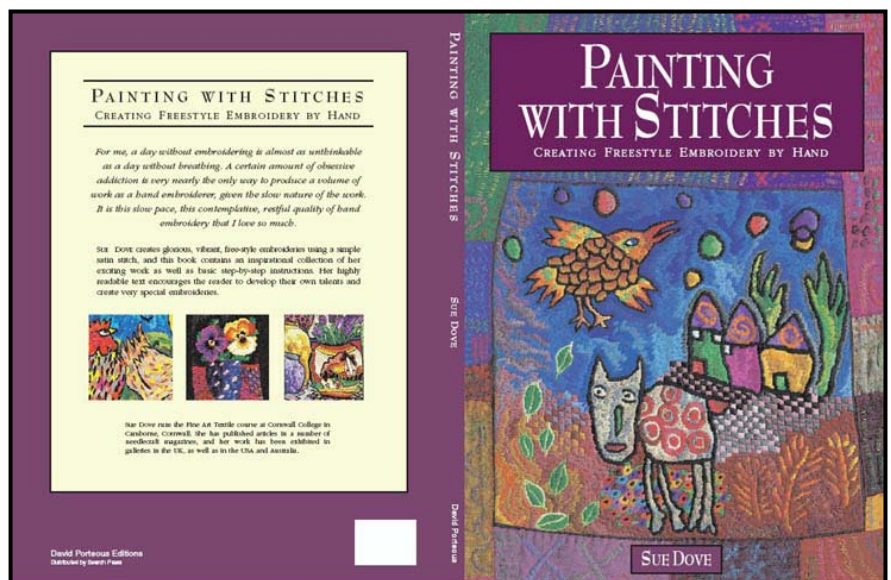
The photographs are from a 2004 project involving drawings which were created by trees.

By taking the movement and dynamics of the art as a basis for their choreography, a company of 40 dancers then produced a work based on the drawings.



Linda Styles has directed and executed a successful exhibition last Autumn at Trelowarren Craft Gallery. The ceramic and glass work represented her work and the work of some of her students, and was highly acclaimed within the regional craft circles. The exhibition was entitled “Burning Issues”. Linda is reducing her fractional post to one day a week to be able to continue her well-respected practice. Her reputation is part of the attraction for students applying to the HNC/D in 3D Design Craft Ceramics at Cornwall College Camborne.

Sue Dove has attended her book promotion event in London. The book entitled “Painting with Stitches” (published by Dave Porteous and distributed by Search Press) has already proved a success within textiles practice. Sue is the programme manager for the HND in Fine Art Textiles, and continues to produce work that is exhibited nationally and internationally. Again, Sue’s reputation as an artist is one of the main reasons for the continuing successful recruitment for her course.



Fine Art Exhibition

This research is funded project brought together five artists that are currently working, or have recently completed a PGCE, at Cornwall College.

Patrick Lowry FdA Fine Art Practice Programme Manager

Katherine Pepper Lecture on FdA Fine Art Practice

Sovay Beriman Lecturer and course tutor ND Fine Art

Samantha Sam-Holmes Artist recently completed PGCE teaching practice on the Foundation Art & Design Diploma

Kirsty Lowry Artist recently completed PGCE teaching practice on the Foundation Art & Design Diploma

The project took the form of an exhibition entitled “stuff in the space” held between Thursday 26th August to Saturday 11th September in space gallery opposite Jubilee Pool in Penzance and attracted a wide audience from both the local community and visitors from outside Cornwall.

The work that was presented sits outside the more conventional, commercial work that we tend to associate with Fine Art in Cornwall, and hoped to promote an understanding of the range of contemporary art being produced in the area.

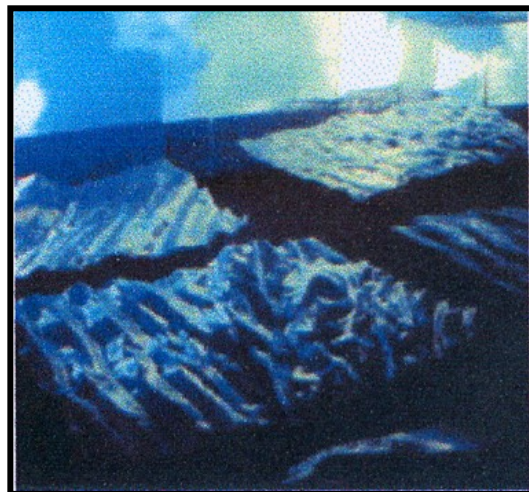
The exhibition offered the group a unique opportunity to explore concepts and ideas that were space dependant for their full realisation and enabled each individual participant to extend and develop their own fine art practice. The exhibited work include sculpture, installation and photography, that explored both traditional and non traditional materials and processes.

Because of the success of this exhibition the group intend to explore future opportunities to exhibit together, both locally and outside the county.

Patrick Lowry (programme manager for the FdA in Fine Art Practice in the Tamar Building) exhibited his 3D fine art work at “Stuff in Space” in Penzance in the summer, alongside fellow tutors **Katherine Pepper** (tutor for the FdA in Fine Art Practice) with her large and impressive photograms and **Sovay Berriman** (second year tutor for the National Diploma in Fine Art in the Tamar Building) displaying her imaginative installations.



Patrick Lowry, Sea 1.
Suspended clear polystyrene
panels. 110 x 90 cm



Exhibition view: Patrick Lowry,
Sea 2.



Katherine Pepper MA use photographic processes to explore and present particular qualities of particular places and environments.

Garden Series Image 2
Detail Digital print

Samantha Sam-Holmes BA

Produces independent three dimensional pieces and small scale installations, that explore the relationships between materials, form and narrative.

“Will You Be Dressed The Same?”

Blue shoes, pigment, mirror



The Second Room (details)

Cupboard, chairs, glass, household objects, bulbs

Kirsty Lowry BA. Installation based work that explores the relationship between personal identity, objects and environment.



Jamie Hanson the programme manager for the FdA Graphic and Communication Design is intending to commence an MA in Publishing in the near future. This will enhance his current vast experience in the graphic design and publishing industry and give a focus of expertise for a proposed in-house publishing consultancy, not only to give the graphic design department opportunities to attract live projects and generate income, but also to support the growing work-based activity for his students.

Jacqui Boddington who leads the FdA in Newspaper and Magazine Journalism is in the dissertation phase of her Masters degree as well as the final year of her PG Certificate in Education. Jacqui will also be taking on the role as programme manager for the HNC in Writing for the Media. She was successful in her first year exam and is now preparing a dissertation that combines the educational elements from her post graduate certificate and her journalistic specialism.

Many other staff have managed to maintain their personal practices and academic study during the year. Some were involved with the 'Open Studio' event in the summer. Some again have received healthy financial support from the Research Committee. We will continue to persuade staff to recognise that their personal work may be considered for this support in the future. We will also continue to strive for more recognition for this activity and aim to reward it with time and status within Cornwall College.

Department for Leisure, Tourism, Sport, Business and Administration.

Rebecca Biddle continues with her research into the perceptions and motivations of the Thanatourist. (Thanatourism is the visiting of sites which have experienced death such as the battle trenches of World War One)

Mike Peters has completed his investigation into the delivery of broadband Internet access in remote regions which was carried out in conjunction with JISC (Joint Information Services Committee)

Mike is currently investigating how technology can be used to enhance the teaching and learning of mathematics as part of his PhD Doctorate

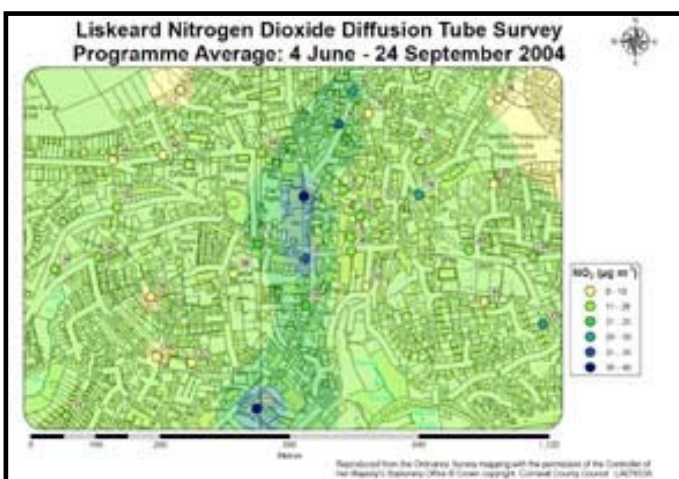
Mike has recently heard that his paper written in response to 'a call for debate on the design, implementation and delivery of ICT Foundation Degrees' is to be published.

The Cornwall Air Quality Forum (Air Quality Unit)

(Barbara Parsons, Jo Barnes, Alex Ledbrooke and Dr Leo Salter)

The Air Quality Unit operates on behalf of the Cornwall Air Quality Forum (CAQF) and is funded by Local Authorities and the County Council and by air quality related consultancy income.

St Stephen: Airborne particulate matter is being monitored at one site in St Stephen in response to local concerns about china clay dust. Monitoring is being undertaken on behalf of the Parish Council since February 2004 and has provided baseline data which will be used for comparison when tipping starts on the nearby Scarcewater tip in 2005.



Liskeard town centre: Survey average.

Newquay and Liskeard: Two large-scale nitrogen dioxide diffusion tube monitoring programmes were undertaken in Newquay and Liskeard in the summer of 2004. The programmes ran concurrently from June to September 2004 and the data provided was used to produce isolevel concentration maps of air pollutant concentrations for each town.

The Newquay and Liskeard surveys were a continuation of the nitrogen dioxide diffusion tube programme which has so far examined traffic-related pollution levels in eight other Cornish towns. The reports can be viewed along with other air quality monitoring reports on the CAQF website (www.cornwall-airquality.org.uk).



Newquay town centre: Survey average.

Falmouth: Nitrogen dioxide diffusion tubes were also used to examine air quality in Falmouth. The data was used to determine whether traffic restrictions imposed in the town centre for the summer months had a beneficial effect on local air quality.

Further nitrogen dioxide diffusion tube monitoring will be carried out in 2005 at 65 sites in Saltash and at previously monitored “hotspot” sites in Camborne, Truro, Dobwalls, Bodmin and Falmouth.

Airborne particulate arsenic in Cornwall. Cornwall’s history of mining and smelting has left a legacy of contamination and pollution. As a result of this activity soil in some parts of Cornwall today has the world’s highest concentration of arsenic, up to 2500 ppm(m). In order to determine concentrations of airborne particulate arsenic monitoring of airborne particulate matter will be undertaken at nine sites in the Kerrier and Carrick districts of Cornwall in the summer of 2005 and 2006. The sites will be located approximately at 5 km distances forming two 20 km transects across some of the most heavily arsenic contaminated areas of Cornwall.

China Clay Dust Forum: The China Clay Dust Forum (CCDF) is comprised of representatives from Imerys, Goonvean, Restormel Borough Council, Advanced Environmental and the Air Quality Unit. The CCDF is in the process of overseeing an extensive air quality monitoring programme in the St Austell china clay area which is being used to feed into china clay working practices. The CCDF is due to end in April 2005. The report on work undertaken at Par is available on the CAQF website (www.cornwall-airquality.org.uk).

Staff within the Unit also supervise research projects of students in the final year of their **BSc Environmental Research Management**. Project for 2005: Microscale Ozone Concentrations at Colliford Lake using Continuous Monitoring and Diffusion Tubes.

In 2004 the **Air Quality Strategy for Cornwall** was launched. The Strategy revealed that whilst air quality is very good in many parts of Cornwall, there are still issues that need to be addressed in order to maintain good air quality and places where it can be improved.

The Strategy was co-ordinated by the Cornwall Air Quality Forum (CAQF) - a partnership of Cornish local authorities, the Environment Agency, the Health Community and Cornwall College. Air pollution affects people’s health and the environment around us – both the natural and built environment. The purpose of the Cornwall Air Quality Strategy is to ‘achieve excellent air quality across Cornwall to protect public health and the environment’.

The Air Quality Unit have been instrumental in the purchase of air quality monitoring equipment by Penwith and Kerrier District Councils to enable the installation of air quality monitoring stations in their respective districts.

The CAQF maintains an excellent spirit of co-operation between the County Council and the Local Authorities with the added bonus of academic links with Cornwall College.

An Air Quality Strategy for Cornwall was published in 2004. Air quality data for Cornwall as well as publications and leaflets can be viewed on the CAQF website (www.cornwall-airquality.org.uk).

Cornwall Dermatology Research Project

(**Dr Alison Curnow** (PMS), **Sandra Campbell** (RCHT), **Dr Leo Salter**)

The Cornwall Dermatology Research Project (CDRP) has continued its research in the UV light induced reactive oxygen species, antioxidant status and photodynamic therapy.

PhD student **Andrew Pye** has now completed his first year with the Peninsula Medical School for an MPhil/PhD investigating the optimisation of photodynamic therapy (PDT), a promising new cancer therapy. His work is looking primarily at the enhancement of this therapy using a novel iron chelating agent and will use cell cultures and patients to examine the effects of this drug.

3

Fluorescence microscopy, the comet assay and the cell viability assays will be involved in this work. The laboratory work will complement the existing clinical trials being carried out within the Cornwall Dermatology Unit. A report of previous investigations of Foscan PDT has recently been accepted for publication by the British Journal of Dermatology and forms part of **Sandra Campbell's** MD research. There are several other papers which are in preparation or which have been submitted for publication by the group.

A number of new research projects have started in the group. **Dr Sara Horton** has recently joined the group as a Post Doctoral Research Associate investigating the effect of UV-absorbing phytochemicals on DNA damage and potential in skin protection. **Katja Adie** is currently conducting a clinical trial titled 'A preliminary study to investigate whether therapeutic paracetamol use reduces glutathione levels and predisposes to oxidative stress and increased DNA damage in peripheral white blood cells after exposure in vitro to UV light'. Which will further the previous paracetamol work carried out by the group. Also **Adrian Flynn** has begun an investigation into the effects of the anti-psychotic drug Olanzapine on DNA damage and antioxidant status.

Zoe Lyle is undertaking research into the potential synergistic mutagenic effects of UV light and Polycyclic Aromatic Hydrocarbons (PAH). Zoe is a PhD student supervised jointly by the CDRP (Alison Curnow, Medical Research Director; Leo Salter, Scientific Research Director) and the Department of Biological Sciences at the University of Plymouth (Awadhesh Jha).

The group is also about to become part of the Peninsula Medical School and has a new office in the Knowledge Spa building at the Royal Cornwall Hospital. Further details regarding research and facilities will soon be available on the PMS website, which is currently under construction.

Cornwall Business School, Camborne (December 2004)

Cornwall Business School continues to research economic and business issues related to the development of Cornwall. CBS-Research, our commercial research division, and the academic staff of CBS have involved themselves in a variety of projects. Beginning 2005 there will be a shift in emphasis as the School expands to include Tourism and IT, whilst social aspects of research and education will be moved to other departments. CBS sees this as an opportunity to strengthen its delivery of both research and high quality educational and training to serve the needs of people, organisations and businesses in Cornwall.

David Ager is undertaking an MA research dissertation on managing parking and travel to college for staff and students. David Ager has completed a second book on sports management ('Handbook of Football Club Management') and is now revising another book ('The Soccer Referees Manual') for publication in a fifth edition.

Dave is currently working on another book, which is an outline of the structure of British Transport. He is now researching for a dissertation about college parking policy which will form part of an MA in Management which he is undertaking in this academic year.

He has had an article published in 'Teach' magazine on assessment, and has submitted another on the writing of assignments. He has also written material for a forthcoming handbook for HE lecturers. He is currently supervising two BA Business Administration dissertations: 'Encouraging women spectators at professional football matches', and 'developing staff training policies in Tesco, Redruth'.



A red card is issued!

Dave Atfield

In August 2004 **Dave Atfield** and **Martin Burgess** delivered a paper to the Regional Science Association Conference in Cork. This paper examined the nature of Carn Brea Leisure Centre as a unique example of community regeneration. Along with Martin Burgess he is currently bidding for Objective One funding to continue this research further by examining links between Carn Brea and the community.



Janet Bardsley is establishing a group of people with learning disabilities to advise and develop research issues in relation to people in this category and to develop capacity for user empowerment. This is linked to the research development steered through DDREG (Development Delay Research in Education Group, South West). She is also evaluating a course which is run by Social Services/Health in conjunction with Cornwall College to train people with learning disabilities to train others about disability issues. She delivered a paper with Deborah Phillips at the OU in June 2004 and young people with learning disabilities' perception of "work"

Martin Burgess has completed research into Hear Our Voice, a project aimed at raising awareness of mental health issues amongst young people in Cornwall. A paper based upon the project is

currently being planned. He is also carrying out the monitoring and evaluation of the Cornwall and Isles of Scilly Sports Action Zone for Sport England, a five year project. He presented a paper at the Sport England South West conference in October on the work of the Zone. He is also on the board of the South West Sports Alliance in a consultancy role. With David Atfield he delivered a paper to the Regional Science Association conference in Cork in August 2004. This paper examined the nature of Carn Brea Leisure Centre as a unique example of community regeneration. Along with Dave Atfield he is currently bidding for Objective One funding to continue this research further by examining links between Carn Brea and the community.

Andrea Collins has been awarded an MA degree in Social Research. She continues to be involved with a research project evaluating the experience of multi-agency training in the Connexions context. This will evaluate the past three years of delivery of this training and will be provided to the Dfes for help in formulating a new framework for multi-agency training for children's services in line with current policy for children and young people.

Maureen Mason has conducted research into issues of identity in the second generation Irish with a view to a possible future PhD.

Dr Bryan Mills, working with **Jim Seligman**, has secured a contract from the University of Plymouth Colleges to develop a new FdA on Small Business Development that challenges many of the traditional approaches to deliver and assessment of FdAs.

Sue Parker Hall is researching the development of models to work with anger and rage in psychotherapy counselling and counselling training practice. An article entitled 'Anger, Rage and Relationship' has been accepted by the Counselling and Psychotherapy Journal and she has submitted an abstract to the BACP (British Association for Counselling and Psychotherapy) Research Conference entitled '*Presenting models for working with anger and rage and therapists responses to them*' to be held in May 2005

Mike Trenerry is continuing to study the irregular issues of coins under King Stephen, and also Henry 1st coinage issues. These will contribute to a refereed journal article. He has also recently completed his MA thesis on 'Rust Out'.

Celia Webster is involved in Research and development of online teaching material, Competition Secretary for Cornwall ASA that entails the use and development of specialist software to run, record and report County and Club swimming events and involved in ongoing activities to keep 'up-to-date' in IT specialist fields, notably Virtual Learning Environments most recently.

Cornwall Business School Research (CBRU)



Marianne Wright has been the Project Manager for CBS Research for four years, and is responsible for developing research proposals, project management, controlling budgets and the day to day operation and co-ordination of the research unit. Previously involved in local, regional and national research projects and, recently leading an ESF funded project investigating the participation of women in senior management and professional roles (WiSPR) in Cornwall and the Isles of Scilly.

Dr Deborah Phillips is co-ordinating a major research project for CBSR (funded by ESF/Objective One) on social exclusion and regeneration. She is currently working on papers for Summer 2005 international conferences in Oslo (Nordic Network, Disability), Manchester (Wellcome Trust, Centre for History of Science, Technology and Medicine) and Loughborough University (Social Work Education).

Two previous conference papers (2003) have been reworked and recently published in edited collections by University of Leeds, Disability Press and Sage, London. Deborah aims to set up a student research group for BSc Social Work students and, in conjunction with Janet Bardsley, a 'learning difficulties' research group at the College. She is also preparing to submit a 3 year Research Fellowship proposal to the ESRC.⁹

Vicky Wallens is currently undertaking an MSc in Social Research at Plymouth. She has been using her experience in the organisation and operation of face to face interviews in the WiSPR project. Vicky is now working on the 5.4 project on social exclusion and regeneration, undertaking field research in selected communities.

Peter Wills is researching towards a MA dissertation on the perception of Plymouth as a growth pole. Peter collects and analyses statistical data for contextual background to CBSR projects. Recent work has included research on learning for regeneration and exploring the potential of community capacity indicators and the WiSPR project.

Dr Rachel Godwin is currently involved in three projects; website design and maintenance for the Centre for Sheltered Housing Studies; an evaluation study for TailorMade; and is part of the team working on the WiSPR (Women in Senior Management and Professional Roles) project. Her previous research has included conducting evaluations of various ESF funded projects including Action Women, Open Doors, Multimedia and Learning Shops - Cornwall.

Andy Knowles is researching social exclusion in Cornwall as part of the 5.4 project. He has formulated a research design that incorporates both quantitative and qualitative methods and has completed an analysis of deprivation in Cornwall. He has material for, and is currently writing, three papers; 'Networks' (with Sue Child), 'Measuring social exclusion: a critique of the Index of Multiple Deprivation' and 'A deprivation profile of Cornwall'.

Matthew Owen is part of the 5.4 project - a European funded research project looking at the social and economic consequences of business development in Cornwall. He has particular responsibility for the business strand of this research and his fieldwork involves interviewing fifty Cornish SME's ranging across sectors. Matthew's background is in media finance.

Cornwall Health Research Unit

The latest evaluation of the Cornwall Stop Smoking Service continues, with more than 500 clients having been contacted 12 months after their quit date. The interviewing stage will end shortly and a report will be published by the end of March. Of particular interest is whether the Service has been successful in attracting clients from areas of high deprivation, usually associated with high levels of smoking prevalence. Of interest in the future will be the effect that the proposed smoking ban in bars and restaurants will have on individual smoking habits and behaviour.

Papers drawn from recent reports on NHS expenditure and the previous study relating to the Stop Smoking Service have been submitted to peer-reviewed journals. An earlier paper on sun protection awareness in Cornwall is due for publication shortly, in the journal *Clinical and Experimental Dermatology*.

The Research Assistant for the Cornwall Health Research Unit, Simon Bennett, has recently been awarded a Masters Degree in Research Methods from the University of Bradford.

Full details of the work of the Cornwall Health Research Unit can be found at www.plymouth.ac.uk/chru

Department of Science Cornwall College Camborne

Staff within the Centre for Science continue to initiate and undertake a wide spectrum of high quality research.

Dr. Bruce Forrest has secured a consultancy contract worth approximately £2000 from the Environment Agency. The work involves high-level identification skills in the examination of water samples supplied by the agency.

Dr. Steve Brown continues to work in collaboration with the [Centre for Research in Information Technology \(CRIST\)](#), based in the School of Computing, Communication and Electronics at the University of Plymouth, on a project exploring the new and exciting physical phenomena associated with spin dependent electronic transport, spin injection, spin torque and spin induced switching in magnetic and magnetic/semiconductor nano-devices in classic diffusive and quantum mechanic ballistic regimes. These new nano-scale spintronic films and devices will have important technological applications in data storage, spintronic computing or bio-medics.

Dr. Michael Hunt will speak in March 2005 on the development of foundation degrees to the senior employer forum of Energy and Utility Skills, the sector skills council of the energy industry. The forum is particularly interested to hear of the development and delivery at Cornwall College of the first foundation degree in the UK on renewable energy technologies.

Staff within the centre also supervise research projects of students in the final year of their BSc Environmental Research Management. These projects include :

- An examination of the extent to which new technologies and changes in work practices can enable reductions in vehicle miles and greenhouse gas emissions to be made by a large distributed employer such as the NHS, without compromising its commitment to patient care. (M. Hunt)
- Three projects in collaboration with Cornwall County Council / Kerrier District Council that are investigating the water quality and animal life in the Red River valley. (B. Forrest)
- Student projects have been supervised Monitoring the Three Lobed Water Crowfoot, *Ranunculus tripartitus* and the Land Quilwort, *Isoetes histrix*, both of which are Mediterranean temporary pond species of the Lizard Peninsula. Both currently appear to be maintaining and even expanding their historical range. The role of climate change in their distribution will be considered in a future investigation (G. Garbett)

Geoff Garbett continues his PhD in the use of palynology for the study of Holocene vegetational history. He is using previously unstudied peat deposits to investigate floristic changes on the Lizard Peninsula plateau.



Department for the Built Environment, Camborne

Popular Consumption and its relationship to British Furniture Design History – from Morris to Russell

Phil Whitfeld

Histories of design regarding popular consumption during the first half of the twentieth century in Britain are difficult to find. No definitive text exists tending to suggest that while the debate surrounding the relevance of both the Arts and Crafts Movement and European Modernism, with regard to design reform in Britain, has been documented (even if selectively) the history of popular consumption has been left untouched.

Debate on early design reform concentrates on the Arts and Crafts Movement, with death of William Morris discourse leaves these shores for mainland Europe and concentrates on developments in France and, especially, Germany and the Bauhaus. The suggestion offered is that Arts and Crafts, with the death of Morris becomes de-politicised and remains only a stylistic embellishment, therefore with nothing further to offer reform. Pevsner, among other historians, has commented on the fact that no further exploration of reform in Britain takes place but offers little in the way of explanation, even suggesting that there has been no serious study.

Phil proposes to explore the legacy of the Arts and Crafts Movement both here and abroad in terms of a craft agenda (Tanya Howard suggests that the development of Modernism in Britain was essentially a craft-based phenomenon therefore it creates its own criteria and has to be examined on those terms); Britain's relationship with the Modern Movement as it develops on mainland Europe and examine both in terms of their effect (or not) on popular consumption in Britain up to the introduction of the Utility Furniture Scheme during WW2.

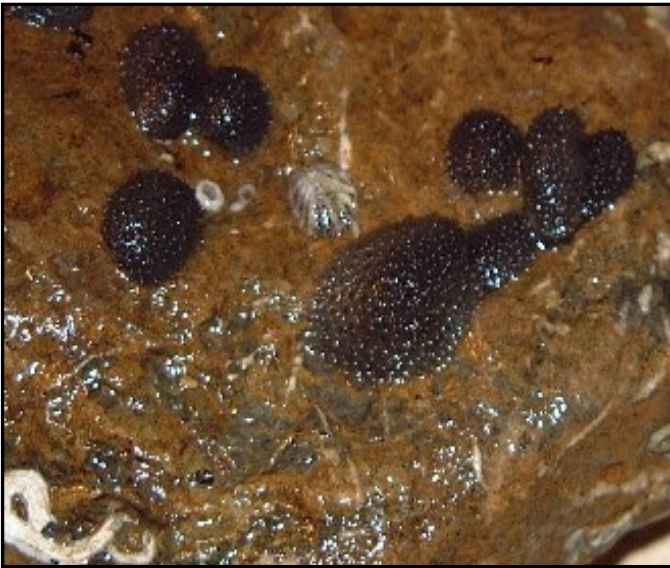
A typical reproduction "Elizabethan" (1558-1603) dining table. Manufacturers would have offered this in a range of materials (traditionally oak), different finishes and various sizes to suit customer needs. This example is available today but would be no different than that offered to consumers from the mid 1800s up to the outbreak of WW2. This traditional form was considered authentic until the Antiques Association established criteria for the classification of antiques at the turn of the 20th century rendering period form of less than 100 years old "reproduction".



Centre for Applied Zoology Newquay

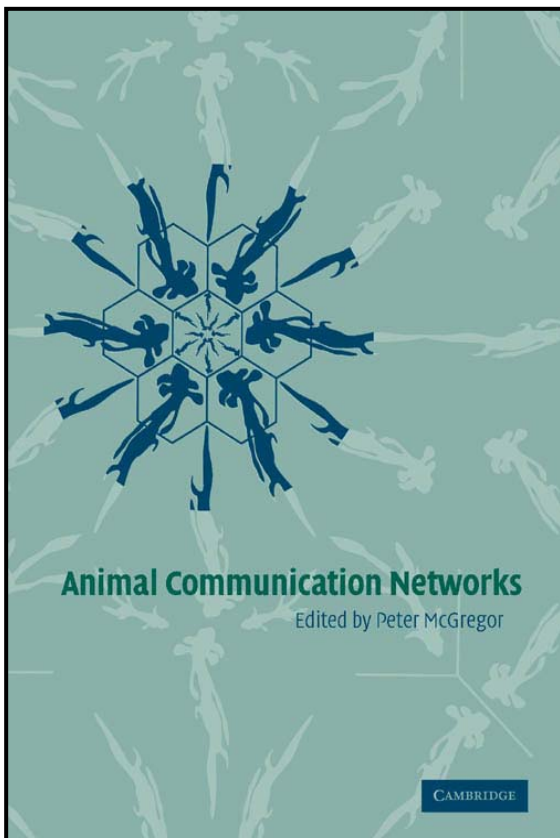


Rebecca Allen has been continuing her study of a colony of grey seals, *Halichoerus grypus*, near Newquay, using photographic identification techniques. Digital images of seals seen at a local haul-out site are used to identify individuals based on their unique pattern of markings. The information on about 30 seals identified in this way is building up a picture of the distribution and social



Celtic sea slug, *Onchidella celtica*,

Dr. Mike Kent has continued his work on the conservation status of the Celtic sea slug, *Onchidella celtica*, an air-breathing, soft bodied mollusc living on rocky shores from Tenerife to southwest England. In the UK, it is regarded as a nationally rare species, but it is locally abundant on certain stretches of the Cornish coast. He continues to have an active involvement with the project *Science in the Twenty First Century*, a collaborative venture between the Nuffield Foundation, York University and Oxford University Press. He is a member of the curriculum development team and has been author of two books. He is also working on the 3rd edition of his *Oxford Dictionary of Sports Science and Medicine* for Oxford University Press.
photo credit: M Kent



Dr. Peter McGregor continues to research into animal communication, with recent publications on both pure applied aspects:

Peake, T.M, & McGregor, P.K. 2004. Information and aggression in fishes. *Learning & Behavior* 32, 114-121.

Pacheco, C. & McGregor, P.K. 2004. Conservation of the Purple Gallinule *Porphyrio porphyrio* L. in Portugal: causes of decline, recovery and expansion. *Biol. Cons.* 119, 115-120.

And an invited chapter in a recent textbook:

McGregor, P.K. 2004. Communication. In: *Principles of Animal Behavior* (Bolhuis, J.J. & Giraldeau, L.-A. eds). Blackwells Scientific Publications: Oxford.

His has edited contributions from 41 researchers from 8 countries into *Animal Communication Networks*, a book scheduled to be published by Cambridge University Press in March. By invitation, he presented results of research on identifying individual male bitterns, *Botaurus stellaris*, from their distinctive booming calls to an international conference in Le Havre, France in December. The research was part of an EU LIFE project on this species of conservation concern and entailed collaboration with CNRS and LPO, France. Other collaborations continue with several universities in Europe and North America and his research was featured in the BBC Radio 4 series *The Sound of Life* as well as *Cornwall Today*.

Lawrence Moores continues his study of the small isolated population of corn buntings, *Miliaria calandra*, breeding on the north Cornish coast. He is now registered for a Ph.D. at the University of Bristol, supervised by Professor Innes Cuthill with local supervision from Dr. Peter McGregor who has worked on the same population since 1979. The degree of conservation interest in this species nationally and locally is shown by the close involvement of the RSPB, with field visits from Dr. Guy Anderson from the RSPB research Department in Sandy, Bedfordshire and Cornwall Farmland Birds Officer Claire Mucklow. A review of a field guide to bird sounds was published:

Moores, L. 2004. Book & CD Review: Collins Field Guide: Songs and Calls of Britain and Europe. *Bioacoustics* 14, 179-180.

[photo credit: Andy Hay, rspb-images.com]



Duchy College, Stoke Climsland

Trials and Research Centre (Dr. Phil le Grice)

The centre is working with project managers at the College and colleagues from the Centre for Rural Research at the University of Exeter, to investigate the impacts of land-based training schemes. The aim is to better understand the networks and mechanisms of knowledge transfer in the agricultural and land-based sector. This will help in the design of future training programmes, and will provide information on social networks and how they operate. The work is designed to innovate in theory and the development of methodology, and lead to peer reviewed publication.

Equine Department

Two members of staff in this department are actively involved in projects at the time of writing.

Lorna Button has recently completed her dissertation on Individuality in Equine Response to Anthelmintic Dosage as part of her work towards an MSc in Equine Science from the University of Essex/Writtle College.

Tessa Counsell is continuing her work in a long term prospective study investigating whether pre-weaning behaviour measurements correlate with later racecourse success in Thoroughbreds.



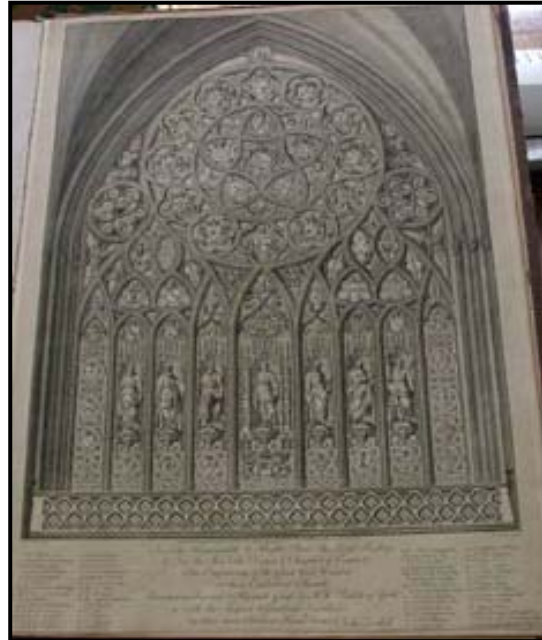
A poster presentation of the results of a pilot investigation took place at the 2003 Conference of the British Society of Animal Science. Tessa is also supervising HND projects on hoeing-related Injuries in Horses, Development of Stereotypies, Degenerative Joint Disease and Saddle Fitting and Associated

Training Problems and Honours projects on Lameness in Riding School Horses and The Use of Positive Reinforcement Strategies in Training Programmes.

Carrie Atkinson Administrator – Rural Progress: Duchy College Project Team, Stoke Climsland

“The Stained and Painted Glass of Exeter Cathedral: A post-medieval perspective”

MPhil/Phd in Art History – University of Plymouth
The research project hinges on an empirical survey of the post-medieval stained and painted glass of Exeter Cathedral and is being conducted at the request of the Cathedral Authorities. The primary objective of Carrie’s contribution to this survey is the addition of short glazing histories to existing architectural and archaeological records of the Cathedral’s many windows. To date the research programme has comprised this and one other element, a detailed study of the Great West Window, and the work of William Peckitt (1731-1795) in particular. The intention of the programme is to assess the changes in taste evinced by glazing programmes over a long time-frame, providing a longitudinal perspective on church patronage in one site



**Figure 1: John Carter Engraving of Peckitt’s Great West Window, 1779
Courtesy of Exeter Cathedral.
Photo: David Risdon**



As a result of preliminary research, the status of eighteenth-century stained and painted glass, as an issue for glass historians and art historians alike, has become apparent. Research during the past academic year has therefore concentrated on major restoration works undertaken during the Eighteenth Century. This work was overseen by two successive Deans, Dean Lyttelton and Dean Jeremiah Milles, both of whom were keen and active Antiquaries and leading lights of the ‘Gothic Revival’. A shared concern – the redemption and articulation of the Cathedral’s historic past – was equalled by a desire to restore to the Cathedral, a dignity, unity and aesthetic harmony befitting an historic and ‘noble’ building: a project that tells us as much about personal ambition as it does about ecclesiastic restoration

Figure 2: An armorial shield representing “The Arms of the Kingdom of Wessex”

Very little of the glass from this period remains. The panel above, an armorial shield representing “The Arms of the Kingdom of Wessex”, painted in 1776 by William Peckitt of York is now situated in the Cloisters (refectory), placed here during the post-war restoration of the Cathedral. The armorial

was originally central to the design of William Peckitt's Great West Window. This whole window was removed amongst much controversy in 1903, when Sir Gilbert Scott, architect surveyor of Westminster Abbey, recommended that it be removed to make way for a memorial window to Bishop Grandisson, prime architect and founder of the ancient Gothic Cathedral we are familiar with today. Evidence collected this year has yielded enough material to enable a partial (digital) reconstruction of the original Peckitt Window.

Research activity has taken me to historic archives and sites of surviving eighteenth century glass throughout the country including York, London, Oxford and Cambridge.

Carrie has presented papers at the University of the West of England in Bristol (*Continuity and Change: Medieval Antiquity and Modern Patronage at Exeter Cathedral c1750-1950*); Plymouth University (*William Peckitt and the Great West Window of Exeter Cathedral: canons of stained and painted glass*) and to the Cornwall College Research Group (*The Stained and Painted Glass of Exeter Cathedral: scratching the surface*). In October of last academic year she was asked to assist with a survey of the stained glass located in the Chapel at Cotehele, St Dominic. This work is credited in the archaeological report published in January 2005. Work completed during this survey has substantially altered current understanding of the history of the Manor.

Conferences attended include *Gothic: an art for England*, at the Victoria and Albert Museum in London, *New Voices, Exeter*, *British Society of Master Glass Painters Annual Conference*, Stafford. Carrie is currently preparing for transfer. Research during the forthcoming months will concentrate on the late nineteenth-century refurbishment programme of the Cathedral and then return to concentrate on eighteenth-century patronage and art practice.

Tony Connell

Tanzania - Deforestation causes in the Sikonge district identified as linear following communication routes. Fire climax vegetation mainly 'miombo'(Julbernardia, Brachestegia). Draft paper submitted.

Grassland Challenge - Environmental audit carried out on seven target farms to establish benchmarks. Sites to be re-evaluated every year over a three-year period to determine whether the Grassland Challenge management prescriptions are affecting the wildlife.

Comparison of modern grassland leys with unimproved pastures, using Longworth traps, to establish populations of small mammals. The study has been running for five years with very marked results demonstrating a total lack of small mammals in modern leys.

Effect of the application of farm slurry on earthworm populations. The study has been running for three years. Total mortality of earthworms in winter months.

Study of flower populations in unimproved Culm grasslands in North Cornwall. Preliminary checklist gathered in summer 2004 and comparative studies started on improved grasslands in adjoining lands.

Soil mobilisation resulting from autumn ploughing. Assessment of impact on river systems including accretion. Study over last ten years. Results are indicating that two and a quarter tons of earth are being lost per hectare, over October, November, and December. The study is hampered by too many variables.

National surveys. BTO Heron census, Winter bird survey, skylark survey, farmland birds, CWT otter survey, water vole survey, BAPs Heather regeneration on Bodmin Moor (ten year study in conjunction with Plymouth University.) Mammal society Yellow neck mouse census, Roadside verges census

Jurie Intachat is investigating the impact of forestry management practices on natural forest regeneration in Cornwall. The aims of the study are to obtain some basic inventory of the structure of different forest stands, determine the patterns of natural regeneration, especially the native species

and evaluate the effectiveness of some silvicultural practices in achieving the continuous cover forest set by UK Forestry. Part of the research study was incorporated as a practical exercise in forest mensuration for the Rural Environmental Management Foundation Degree students taking the Woodland & Machinery Management module.



Fig. 1: A member of staff showing students how to use the clinometer (a) & the dbh tape (b).

This year, two different species stands, Western red cedar (*Thuja plicata*) and Japanese larch (*Larix kaempferi*) of the same age; both planted in 1984 were surveyed within Duchy Woodlands. A total of 1,091 trees/saplings/seedlings had been tagged, measured and recorded in both stands out of which 315 individuals were regeneration. Fourteen regenerated species were identified in the Western red cedar stand but only seven regenerated species were recorded in the Japanese larch stand. Of all the broadleaf species recorded beech (*Fagus sylvatica*) appeared to be the most abundant species in both stands; accounting for 58% of the regenerated species in the Western red cedar stand and 50% in the Japanese larch stand.

Martin Robinson Cert Ed. DMS. MBA. MIQA

Martin has successfully completed his MBA at Plymouth University and graduated in December. Martin's study was entitled: "A feasibility study and business plan to establish a residential activity and rural tourism centre in Southern Spain for the Cornwall College Group and partners". A copy of which will be placed in the RBL centre at Duchy College

Martin's final piece of work was to produce an Enterprise Folio (study) which included:

1) **A concept paper** outlining the current theories of entrepreneurship, the characteristics of an entrepreneur and an evaluation of the candidate to lead an entrepreneurial enterprise. This section included the works and theories of Schumpeter, Maslow, Adair, and Mintzberg, with reference to the EU Green Paper on Entrepreneurship, Tim Smitt and the Eden Project. This was backed up by a series of internet assessment and evaluation tests for entrepreneurial characteristics.

2) **A sector analysis** and market research study to establish user requirements and potential user groups from within and outside the Cornwall College Group. This included making a stakeholder map to identify stakeholders within and outside the college, analysing user needs, location and times of year for potential user groups and market research through a qualitative questionnaire sent to potential user groups including local schools, college groups and Rural Tourism groups in all EU countries.

3) **A business plan** to establish the financial and operational viability of the project. This section included all aspects of setting up and purchasing property in Spain, a review of Spanish employment law, return on investment projections and user pricing structure, cash flow forecasts for four years, operational structure, capital and working capital investment details and a marketing plan. Agents in

Spain were contacted and site visits were made in the targeted area. Field work was undertaken for about three weeks in Andalusia during April and August last year.

The service provision is dependent on specific individuals having the time and ability to run the process as a business not as a part time extension of a crowded and demanding job.

NB: SAMPLE EXTRACTS ONLY, THE FULL STUDY HAS BEEN COMPLETED
CANILLAS DE ALBAIDA (2,000ft) IN THE ALMIJARA MOUNTAINS ANDALUSIA:
(Just 5 hours door to door from Launceston)

Martin Robinson: Calle Fuente 3, Canillas. 12/8/04



Falmouth Marine School

Research and Scholarly Activity 2004

Introduction

Falmouth Marine School's research activities have been at a preparatory stage this year, ready for a major push in the years 2005-6 and onwards. There have been many discussions with a number of environmental and marine organisations initiated by **Toby Field** and **Jason Birt** into bio monitoring projects that can be undertaken by staff or students. These projects will include monitoring selected long term rocky shore locations for population changes, monitoring the habitat of the trembling sea mat (*Victorella pavida*) at Swanpool and long term zooplankton monitoring in the Carrick Roads, Falmouth Bay and towards the Lizard. This last project will be undertaken to provide data for the monitoring of regional and global warming, ascertain the number of invasive plankton species and, after some tentative discussions, may also be of use to MER, the independent research consultancy based in the Marine School.

Staff Projects



2004 saw the culmination of **Rory MacPhee's** project into widening participation in small craft design and build, funded by a grant from the Research and Scholarship Committee. This project developed new internet materials for use by a wider number of people and saw collaboration with Falmouth College of Art and Perranporth Primary School. The final publication was a small guide book on how to develop and build a coracle. Additionally, **John-Paul Eatock** is undertaking a masters in Management and Toby Field is studying for a Masters in Education.

Student Projects

Student projects have become much more applied this year. The joint winners of the RINA HND project of the year award each undertook a very practical, laboratory-based project. **Caroline Patterson** undertook research on food preference in the common periwinkle (*Littorina littorea*), using extracts from various seaweeds to determine whether the periwinkles could follow a food scent and express a preference. Her work supported some of the findings published by Norton, amongst others, and has been followed up by new research in this academic year on whether habituation to a certain seaweed type influences food preference.

Philippa Reading (the other winner) investigated the use of hormones in initiating spawning in the queen scallop (*Chlamys (Aequipecten) opercularis*). Her preliminary results found no inducement, but this could have been due to injection site choice as some *in vitro* study found that germinal vesicle breakdown (GVBD, a key stage in the fertilisability of an oocyte) could be induced. These scallop experiments will be repeated on a larger (and statistically significant) scale by **Jason Birt** this year. Other students' work included a study of pollen grains at Praa and Slapton Sands and an excellent study of a flexible, hydrodynamic rudder. New students' projects started in 2004 and culminating in 2005 include analyses of cetacean strandings data kindly provided by **Ruth Williams** of Cornwall Wildlife Trust, determination of winter sewage pollution levels with some assistance from Surfers Against Sewage and the development of new boat designs by a number of the Boat Design and Production students. This last development is making good use of innovative design using CAD and then modelling using CNC (computer numerical control) cutting devices and new composites. These models will then be tank-tested to determine their effectiveness.



Philippa Reading: Lab work

Conference Attendance and Research Day 2004

Lecturing staff have attended a number of conferences. **Jason Birt** attended the Coastal Futures conference in London and brought back a number of initiatives and a quantity of information that has been fed back into teaching. Other staff members (**David Warren, Toby Field, Ken O'Brien**) have attended conferences related to development in HE and information from these has been used to shape Foundation Degree development at Falmouth Marine School.

FMS also held its first research day at the National Maritime Museum Cornwall. It was a successful day with a number of staff speaking including **Professor Richard Matthews** on tunnel aerodynamics and the development of fans,

Jason Birt, outlining future research developments and integration of this into teaching and **Rory MacPhee** feeding back on his project on widening participation in the design and build of small craft, including a view of small craft development from historical times. Guest speaker was **Colin Speedie**, who was explaining the role of wider participation in basking shark research, an area FMS would like to assist with. Two HND students also gave short presentations on their projects. The 2005 research day will again be held at NMMC and is on the 8th June.



**National Maritime Museum workshop.
Research Day 2004**

Most HE staff and HE students (as well as some FE students) attended a Conference in Torquay on Public Health and the Environment. **David Warren** spoke about the restricting of technology to enable sustainable fishing. His presentation garnered the most questions from the audience in a post-presentation panel session.

September saw the start of Falmouth Marine School Research (FMSR), a research unit with the main aim of involving all students in the participation of low-level yet original research. £400 has been kindly granted from Continual Professional Development funds to help set up this research unit, through which all of the research referred to above will be carried out. Other than student participation and bio monitoring, the other aims of this unit are to set up the Cornwall Marine Environmental Educators Association (CMEEA), if other organisations are interested, to help share information, good practice and research and to start research techniques summer schools.

Cornwall College St Austell

Department of Business & Leisure

Nicola Horley, Chris Pascoe and Jackie Hanton have all now achieved their Diploma in Management Studies.

Jackie Hanton continuing to work towards an MA in Education.

Department of Technology

Staff in this department currently following HE activity/research include:

Phill Belden - MBA with APU
A Phillips - HND with CC
J Perry - TLC Project

Department of Art, Design & Media

One new part-time member of staff, **Mel Brown**, working on her MA at Falmouth.

TLC Project

No update at this time received from **Mike Tedder**.

Note: Project completion due end of March 2005.

Robbie Alberry

Development of Retail Management Cluster of Foundation Degrees successfully approved in HE Planning Group etc.

Cornwall College Saltash

Kevin Smale, IMP student and lecturer at Cornwall College Saltash gave a presentation at the Saltash 2004 Research Day entitled “A reflection on the academic development of Access to HE students in a Further Education setting with consideration of the impact of teaching style and approach” or “The metamorphosis of Access students”. The aim of this research was to investigate the academic and personal development of students engaged in the Access to HE programme. Students were tracked throughout the 34 week course using a variety of methodologies to assess their actual and perceived progress.

The objectives for this research were two-fold. In the first instance the investigation planned to ‘open up’ or ‘reveal’ the main development areas within students and give explanation for their apparent growth. In addition, the research would be used to stimulate a personal reflection on teaching styles and approach and how these impact on the achievement of students.

The results of the research indicated that students do in fact undergo recognisable changes throughout the life of the course located around differing binaries, for example, *engagement with a posteriori /a priori (Kant) learning, transition from extrinsic to intrinsic learning motivations, development of independent learning styles, and demonstration of Mastery-Oriented Patterning (Dweek)*.

On a personal level, the author drew heavily from the work of Donald Schon and Carl Rogers and reflected on his own approach to Access students. The result was a recognisable deviation away from a technical-rational model towards a humanistic “facilitation” role for the teacher, encouraging a sharing in the learning experience.

This field of study will be the focus of attention for Kevin’s dissertation. Broadly speaking he will be problematizing “language” as a barrier for Access to HE students.

Title: “Do departments within an F.E. college need to share a common culture?”

This piece of research sought to investigate the cultures that emerge within F.E. colleges and how they affect the institutions identity. Data collection took the form of a questionnaire which was

administered to selected teaching staff within Cornwall College – Saltash. The questionnaire used was based closely on that developed by Charles Handy which was designed to identify organisational culture links with Zeus, Dionysus, Apollo and Athena models.

This research was prompted by a 'feeling' that there had been a change in the colleges identity since merger and also that individual departments appeared to have distinct and definable "characters" despite conforming to a given hierarchical structure and set systems/policies.

The results suggested that the differences between departments were in fact minimal and were brought about by management style and approach issues rather than the more comprehensive cultural variations. Of some interest was an expression of concern over the dilution or replacement of the College's identity and individual characteristics by 'the corporation'.

Michelle Pooley (Travel and Tourism) presented a research paper at the Saltash research day entitled "*A Comparative Study of Sustainable Tourism Development in Cornwall and Andalucia*" which investigated and compared the ways in which the popular tourist destinations of Cornwall and Andalucia are attempting to change their traditional holiday image and develop a new, more sustainable, tourism product. Both areas were immensely popular in the post-war period as sun, sand and sea destinations, but popularity declined in the 1980s. One of the reasons for this change was a deterioration of environment and image caused by inadequate planning, overdevelopment and a failure to react to changing tourist demands.



The 1990s have seen attempts by both regions to upgrade their image in order to appeal to a more discerning tourist, and to develop a sustainable tourism product which is more sympathetic towards local social and environmental values. The research finds that local concerns for economic development often override desires to preserve culture and protect the environment. The task of developing a product which is capable of conserving culture and heritage, protecting vital resources and the environment, and yet also is economically beneficial to the host community is extremely difficult. Different areas have conflicting priorities, depending on the type of tourism and the level of dependence on tourism in the area. Andalucia is an autonomous community, and as such has greater control over the collection and distribution of local taxes. This, together with a clear tourism policy since 1990, has been an effective planning tool for sustainable tourism development in inland areas and for redevelopment of coastal areas.

Research update for Duchy College, Rosewarne

Horticulture

Dr Barry Mulholland organised Rosewarne's first research day 'Focus on Horticulture' which took place on 26 May 2004. The conference broadly addressed sustainable production methods but specific speaker topics ranged from cauliflower breeding, organic systems, conservation horticulture to plant stress physiology. The event attracted speakers and participants from Plymouth University, The Eden Project, Local Growers and Horticulture students.

Dr Barry Mulholland and **Ros Smith** are involved in a joint "Conservation or rare species" project with The Lost gardens of Heligan and DEFRA, to tackle the serious problem of *Phytophthora ramorum* (sudden oak death). Rosewarne is the only licensed centre of excellence in the UK for micropropagation of ancient Rhododendron and Camellia species under threat of eradication by *Phytophthora ramorum* infection.



Photo of Rhododendrons from Heligan Gardens undergoing micro propagation in the Rosewarne laboratory



Dr Barry Mulholland is currently trialling a novel hydroponic vertical growing system for high volume strawberry and perennial herb production (Plate 1). This project is actively working with the local Cornish Horticulture Industry and is in receipt of substantial financial support Cornish Horticulture Enterprises (CHE). Other hydroponic systems are also being trialled for novel crops in Rosewarne's new 1.4 ha computer controlled glasshouse facility.

Fruitwise vertical hydroponic strawberry growing system.

Biological control of Japanese Knotweed continues and a talk by **Dr Barry Mulholland** detailing pot trial work at Rosewarne was well received by the Cornwall Knotweed Forum on 3 Nov 2004.

Marshall Hutchens has recently completed a research project in collaboration with the Eden project that involved current sustainability practices within Cornish nurseries, and was funded by CHE.

Bill Herring continues with Brassica variety trials funded jointly by the CHE, HDC and seven International seed companies. For more detailed information on trial results and genotype performance, visit: www.cornwall.ac.uk/research/herring. A new HDC funded trial is investigating the effect of selective herbicides for use with Brassica varieties.



Rosewarne Brassica variety trials. 2004

Animal Care

The **Dept of Animal Care and Veterinary Nursing** has a number of research projects underway. **Dr Andrew Smart** has been developing a county wide survey of little egret with help from the local press. Notices in the West Briton and Cornish Guardian have led to over 50 members of the public working with Duchy College on the survey. The results (Figures 1 & 2) are still coming in for the January survey date and one more survey in April will complete the work. The work has two objectives: one to assess the value of using the public for survey work on easily recognisable species; two to identify a number of study sites for Bird Biology students to undertake research work in their second year modules. **Dr Smart's** questionnaire based survey of research in Zoological Gardens in the UK is now ready for circulation and the replies are planned for analysis in May.

Figure 1. Number of birds per recorder over the survey

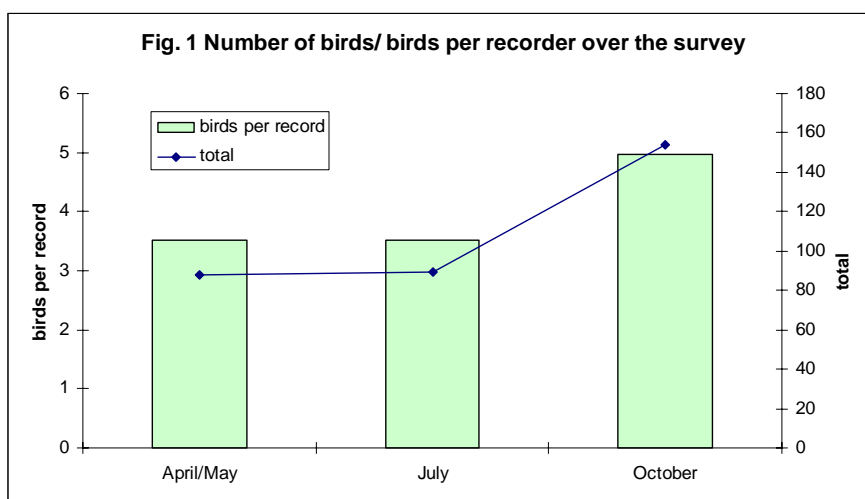
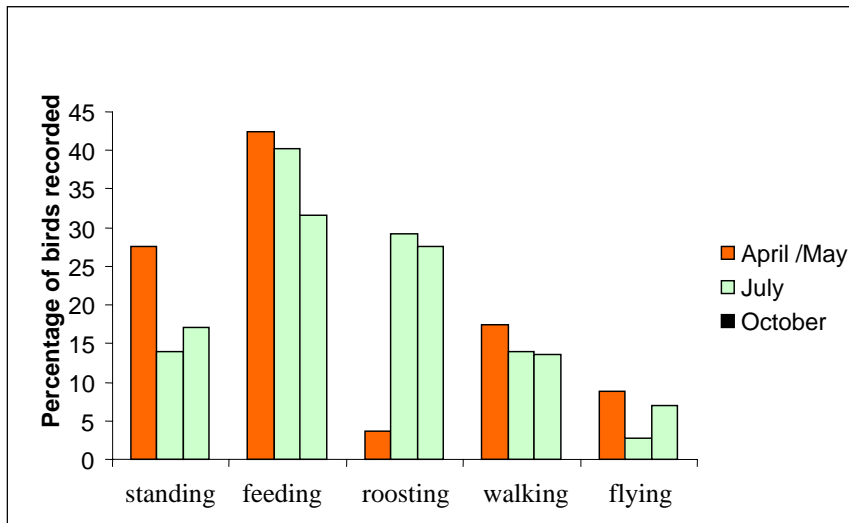


Figure 2. Little Egret behaviour



Bird Biology student, **Marcus Kreft** has taken on a new project with the college to investigate the care and husbandry of macaws in European Zoos and Bird Parks. Other student projects include **Ben Coombe** working on badger territory sizes in south Cornwall; **Stacey Smitham** investigating welfare incidents on farms and **Christina Gerry** and **Lucy Howell** working with the Organics Centre at Rosewarne to look at milk and beef production on organic and non-organic farms.

Victoria Buchorski and **Marianna Jones** are working with a number of UK Zoos to investigate captive behaviour of Sulawesi macaque and red panda. Lisa Jones is working at Paradise Park, with the assistance of Prof. Peter McGregor (at Newquay) investigating parrot sexing and identification using calls.

Dr Jean Burke, Project Leader at the Organic Studies Centre (OSC), Duchy College Rosewarne has been involved in many aspects of a growing portfolio of research developed by this Objective 1 funded project. She is leading for the OSC in a joint Organic dairy herd health and welfare assessment and benchmarking project with the University of Bristol Department of Clinical Veterinary Science. This project is funded by the Organic Studies Centre R&D Budget, Mole Valley Farmers Ltd., the Organic Milk Suppliers Co-operative Ltd., Milk Link and the British Cattle Veterinary Association. The on-farm herd assessments highlight strengths and areas of weakness, whilst the benchmarking, by comparing performance across farms, identifies where improvements might be made to cow health and welfare.



As a separate strand to this work, the OSC obtained DEFRA funding (project OF0343) to obtain feedback from participating farmers about their responses to the work. To obtain this information, Jean has carried out one to one semi-structured qualitative interviews of all participants to understand the impact and influence of the assessment and benchmarking exercise on the farming systems and animal health and welfare on the farms. Further work in this area is planned for 2005 - 2007.

A study of organic protein crop production for livestock systems was established in spring 2004 on a 30 acre farm site near Mitchell, Cornwall, funded by OSC R&D Budget, Olivers Seeds, Biotal UK and Soya UK and managed with the assistance of the host farmers. The aim of the study was to provide crop management and both physical and financial performance data about organic protein crop production in Cornwall. This work will continue in 2005.



Organic lupins grown to provide protein for livestock feeds

Potato variety studies established for the second year running on a farm near Looe in east Cornwall with Bioselect UK aim to identify varieties best suited for organic production in Cornwall. The studies evaluate blight resistance, tuber yield and tuber quality., Cooking and flavour evaluation of the varieties is then carried out by student chefs at Percy's Country Hotel and Restaurant and at Cornwall College Centre for Hotel Catering and Bakery Studies. Further studies linked to Bioselect UKs wider research programme are planned for 2005.

A survey of invertebrate species on Duchy College organic land, funded by the Cornwall College Research Fund was carried out during 2004 by Duchy College student Peter Mycock during a work placement at OSC. The aim of the study was to document species distribution and diversity in a stockless organic farming system. This study contributes to biodiversity information provided by ongoing small mammal and bird surveys conducted by OSC on Coswinsawsin organic demonstration farm which have been supported by the Cornwall College Research Fund since 1999.

Details of other OSC research activities and publications can be found at www.organicstudiescornwall.co.uk

Stephen Roderick at the Organic Studies Centre, Duchy College, Rosewarne has been involved in a number of new and ongoing research as part of the activities of the Objective I-funded project. A study examining the **quality of organic cereals** was started in 2004, and is funded for three years by Devon Grain Stores Ltd, West Country Grain Marketing Ltd and others. The overall objective of the study is to identify the factors that would improve the integration of organic cereal and organic livestock production in the south west. Replicated trials of **cereal varieties suitable for Cornish organic conditions** were held at a farm site near Looe and involved 32 varieties of spring wheat, barley and triticale. The trials were conducted in collaboration with The Arable Group (TAG) and will be repeated in 2005.

A trial on the Lizard peninsula has been examining the performance of **blight resistant potato varieties** with the Sarvari Trust, including more than 20 varieties. Steve is about to start work on Defra-funded work on an **electronic compendium of animal health and welfare in organic livestock** in collaboration with The University of Reading. He is also the co-ordinator of the Organic Studies Centre role in a collaborative project with ADAS, IGER and Abacus Organic Associates on **developing guidance for organic farmers on fertility building crops**. This has involved the hosting of a **novel legumes trial** at the College's Coswinsawsin Demonstration Farm and ensuring effective dissemination of information to, and feedback from, the farmers of Cornwall.

A farmer open-day was held during August 2004 at IGER North Wyke to present the results of the research. Other projects activities included a study of the **on-farm monitoring of faecal egg counts in organic sheep**, funded by the college research funds and a comparison of **grass species mixtures suitable for organic farms**, funded by Cotswold Seeds Ltd. Two different mixtures of grass, herb and legume species are being grown at six farm sites located throughout Cornwall. Steve was also involved in the Defra-funded work on **benchmarking animal health and welfare assessments of organic dairy herds**, which is being led by OSC project leader Jean Burke.

Also during 2004, Steve was invited to teach on an international PhD summer school held in Denmark on the topic "Is Organic Farming the Key to Sustainability" and contributed to the Danish Research Centre for Organic Farming (DARCOF) knowledge synthesis on organic agriculture in a global perspective. He contributed to five papers at the British Grassland Society and Colloquium of Organic Researchers conference at Harper Adams, Shropshire, including two papers describing organic farming in Cornwall. He also attended a workshop in Germany on animal health and food safety in organic farming (the EU-funded SAFO project) and presented a poster on organic poultry production in the south west. As part of his involvement in the Network for Animal Health and Welfare in Organic Agriculture, he co-edited the book "Organic Animal Health and Welfare in Organic Farming" (CABI Publishing) and contributed to six of the chapters.

Details of other Organic Studies Centre research activities and publications can be found at www.organicstudiescornwall.co.uk.

School of Education and Training, St Austell

Researchers:

Steve Harris: M.Ed – Cert Ed
Research and Scholarship Manager
Corporate School of Education and Training

Research Details:

Evidenced based Research - Teaching and Learning, Qualitative Research Methodologies and Methods, Development Education: Global Perspectives in Lifelong Learning, The Nature of Educational Enquiry, Cultural Identities of Teachers in Post-Compulsory Education.

Selected Publications:

Promoting Change through Education: *Strengthening Global Perspectives in Lifelong Learning*, Research Report -
Development: Education Association – Awaiting Publication.

Researching Education: Classroom-based Research – Exeter University PGCE (PCE)

Steve Harris is the Research and Scholarship manager for the Corporate School of Education and Training. He has carried out research into an Action Learning project with groups of Cornwall College trainee teachers (PGCE) and Key personnel. The work was a successful project bid in conjunction with the Development Education Association (DEA). A paper will shortly be published

with the DEA: *Development Education: Strengthening Global Perspectives in Lifelong Learning*. Steve is currently managing a large research project proposal with the Standards Unit, Lifelong Learning UK and the DfES future reforms into Initial Teacher Training. The work will evaluate the impact of teaching observations carried out within different learning contexts; the research will include a range of college subject specialists, mentors, managers, heads of department, and senior colleagues in the NHS.

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