



MAGAZINE OF THE ENVIRONMENTAL SCIENCES ASSOCIATION OF IRELAND - AN ASSOCIATION FOR PEOPLE WORKING IN THE ENVIRONMENTAL AREA

Urgent need for field and team training

Students planning a career in the environmental sciences need training in a range of professional skills that are not taught on college courses. Mark Costello reports



Photography: John Matthews

As students begin their summer break, they may consider using this time to develop skills, gain experience and demonstrate their ability in activities relevant to their future career. This is especially important since professional skills are not sufficiently learned and examined in college.

Field courses are popular with students because they learn practical skills and observe activities and patterns in the environment explained in lectures. Laboratory classes can be similarly successful. Practical classes for both field and laboratory skills are typical of university degrees. These practical exercises develop students' team-working skills, which are considered essential in the workplace. However, little or no formal interactive practical training is provided in the more

general professional skills. This training could take the form of workshop classes where projects are designed, data is analysed, interpreted and synthesised and concise reports written. It is these skills that environmental scientists will spend most time on in their professional work.

Many professional skills are often not part of university science degrees (see Table, page 6). Students should be aware of the value of these skills, especially when extra-curricular activities are cheaply available in universities.

The objectives of a course should be stated in advance and be made relevant to students' potential employment. Practical work and examinations should test a student's ability to perform new and previously learned skills so as to increase the student's competence and confidence in their professional skills.

University training should not be limited to the skills unique to a degree course, but incorporate the more general professional skills which employers will need. If a skill is important, it should be taught and should be examined. ■

ESAI Environmental Scientist Award
The Environmental Scientist Award 2001 will be presented at the ESAI Colloquium, *ENVIRON 2001*, at Dublin City University in January 2001. See page 7 for details.

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Articles welcome

EnviroNews welcomes articles and photographs relevant to the environmental sciences in Ireland. *EnviroNews* also welcomes your letters, comments and suggestions. Please write to the editor. Material for the autumn issue must be submitted for consideration before August 1st, 2000.

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enviroNews

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PLANNING

“Protected” areas?!

A study completed by the Irish Wildlife Trust and funded by the Heritage Council has found that the planning process is not paying due regard to candidate Special Areas of Conservation under the EU Habitats Directive. Shirley Clerkin of the Irish Wildlife Trust reports



The impact of the planning process on the conservation of Special Areas of Conservation (SACs) under the EU Habitats Directive has been reviewed by the Irish Wildlife Trust (IWT). Results indicate that, in many cases, the fact that a site is listed

for protection makes no difference to the way it is treated with regard to planning.

The basic method of nature conservation under the Habitats Directive is the selection of sites as SACs for the protection of certain habitats and species. SACs will form part of a European network called Natura 2000.

The National Parks & Wildlife (NPW) section of Dúchas, the Heritage Service, advises all planning authorities on the implications of planning proposals for areas of conservation value. The NPW has stated that “if it is considered that a proposed development would have a significant impact on the integrity of a site of conservation value, the Department would object to the granting of planning permission.” It rarely does so, however.

The study examined all planning applications (totalling 159) made within SACs in counties Wicklow, Clare, Mayo, Roscommon, Leitrim and Offaly during 1997-1999. The applications fell into the following categories: dwellings, extensions, tourism, industry, agriculture, other. Only 48% of planning applications were referred to the NPW for comment, and the NPW commented on only half of these.

The referral rate differs considerably, ranging from 66% from Clare Co Council to 0% from Offaly Co Council. Four of the six counties examined referred 20% or less of planning applications within SACs to the NPW.

The NPW lodged objections to 8% of applications only (nearly a third of these were subsequently refused planning permission). In

county Wicklow, where as many as 35 applications were made, the NPW objected to only one - a controversial jetty proposal for the Murrough, north of Wicklow town.

70% of all applications for planning permission were granted within SACs (in some counties the rate of success was much higher). 14% of all applications were refused permission. The remainder were still under consideration at the time of writing the report.

It is the opinion of the IWT that all planning applications within SACs should be examined by the NPW, and that all applications referred to the NPW should be commented on. Where the NPW object to a proposed development within an SAC, then planning permission should be refused.

Under the Habitats Directive, a development that will adversely affect the conservation status of an SAC is prohibited except in very limited circumstances of “overriding public interest” and only on the grounds of human health and safety. In order to determine whether a development would have an adverse impact on the ecological integrity of a site, an environmental impact

“When the NPW object to a proposed development within an SAC, planning permission should be refused”

Table

Development type	No of planning applications	No of referrals to NPW	Planning permission granted
Dwelling	72	35	52
Extension	34	12	28
Tourism	15	6	4
Industry	9	4	4
Agriculture	10	5	10
Other	19	12	14

Breakdown of applications by category within SACs in 1997-1999: numbers of applications; numbers referred to the NPW; and numbers granted planning permission.

assessment (EIA) needs to be carried out, and can be requested under the Habitats Regulations. Planning decisions should not be made in the absence of an EIA or other suitable form of environmental appraisal.

By referring planning applications to the NPW, planning authorities hope to receive an indication of whether a development will adversely affect a site. If the NPW fails to reply or is not notified in the first instance, then the very first stages of SAC protection are bypassed.

The IWT has recommended that guidelines for planning within SACs be drawn up, as a matter of urgency, by the Department of Arts, Heritage, Gaeltacht and the Islands, and issued to all planning authorities. Such guidelines should, for example, stipulate that applicants be advised if a development site is within an SAC. Also, planning applications within an SAC should be sent to the NPW and local wildlife ranger for their opinion before submission to the planning authority.

The cumulative impact of developments within SACs also needs to be carefully

monitored by the NPW and taken into consideration when looking at particular applications. All planning information within SACs should be held on a GIS to facilitate proper planning and help assess cumulative impacts.

The EC Environment Commissioner Margot Wallström has congratulated the IWT for this survey which, she says, "deals with the very important issue of the need to provide effective safeguards through the planning process for areas of European conservation importance to be included in Natura 2000." She added: "Based on your information, it would appear that the present system is not operating in an effective way. My services will be writing to the Irish authorities to express our concerns and to remind them of the obligations of member states to protect these areas of high conservation value." ■

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SACs being damaged

Irish conservation NGOs say the Habitats Regulations need to be better enforced. Cólín MacLochlainn reports

The EU Habitats Directive needs to be fully enforced to ensure that Special Areas of Conservation (SACs) do not continue to be damaged or destroyed, according to five leading conservation groups.

Many candidate SACs are being damaged by developers who seem unaware of their conservation status. In other cases it appears that the intention is to destroy their scientific value in order to avoid SAC designation.

SACs are legally protected from the time the landowner is notified of the proposed designation. Certain activities cannot be undertaken without the consent of the Minister for Arts, Heritage, Gaeltacht & the Islands. But many landowners are disregarding this protection, the groups told a press conference in Buswell's Hotel, Dublin, in May. They named 28 SACs which had been damaged or were under immediate threat, including Pollardstown Fen, which is threatened by the proposed Kildare bypass.

The groups - An Taisce, BirdWatch Ireland, Irish Wildlife Trust, Irish Peatland Conservation Council and Coastwatch Ireland - called on the Minister, Ms Síle de Valera, and on Dúchas, the Heritage Service, to take whatever steps were necessary to ensure



compliance with the directive.

The Department was prosecuting three parties for destruction of SACs and was investigating the legal implications of a further six cases, Minister de Valera told RTE 1's *Questions & Answers* on May 29th. She was responding to a question from Shirley Clerkin of the Irish Wildlife Trust.

The Minister recently added 44 sites, mainly marine sites, to the list of proposed SACs. The Department has now transmitted 264 sites to Brussels, while a further 102 proposed sites remained to be transmitted. More sites will be named before summer's end, and the total will reach about 400. ■

Publications

The Habitats Directive In Ireland

By Scannell, Y, Cannon, M, Clarke, M, Doyle, O (1999)

Published by the Centre for Environmental Law and Policy, Trinity College, Dublin

Grant-aided by the Heritage Council ISBN 0-9534979-0-9

This book, a collaboration between Prof Yvonne Scannell and three environmental law undergraduates, is a comprehensive critical examination of the manner in which the EU Habitats Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations (1997).

The introductory chapters focus on European Community law and the Irish constitutional protection of private property. The main body of the text is a comprehensive review of the Habitats Directive and the Habitats Regulations, focussing on issues such as the process of site designation for Natura 2000, controls on land use, compensation schemes, measures to protect species directly and schemes available for funding habitat protection.

The Impact of Planning on Special Areas of Conservation

By The Irish Wildlife Trust (December 1999)

See article, facing page.

Environmental Law: A Glossary and Handbook

By Comerford, H and Fogarty, ARM

Published by Round Hall Ltd, Dublin (€95.00)

A guide to the diverse statutes dealing with environmental issues in Ireland. Presented in a glossary and dictionary format.

Environment Management

Environmental Management Ireland (EMI) is a free A4 colour magazine. The Irish Energy Centre reported in Vol 5, No 5, that environmental regulations and energy auditing had saved big industry €3m and reduced CO2 emissions in Ireland.

• Contact: Email: envmi@indigo.ie
Website: <http://indigo.ie/~nestron>

Project for the people

SEMPA is a north Dublin environment programme for planning in cooperation with the local community. Dearbhala Ledwidge spoke to SEMPA project director, Maryann Harris, about their work

SEMPA

(Suburban Environmental Management Participatory Approach) is a community environment project run by Dublin Corporation and Fingal Co Council in the North Dublin Bay area (Howth, Sutton, Baldoyle, Kilbarrack, Grange and Raheny). It is one of only three EU LIFE-Environment programmes selected for funding in Ireland in 1999. The area includes a UNESCO Biosphere Reserve (North Bull Island) and three sites proposed for Natura 2000.

SEMPA runs an Environmental Forum of local authorities, Suburban Rail and the local community which evaluates planning issues and resolves conflicts of interest. Local Planning Groups produce action plans and programmes reflecting the needs of the community in cooperation with local authorities.



Dearbhala Ledwidge: What were the main environmental issues and areas of conflict identified by local residents?

Maryann Harris: Development and housing pressure, especially where this had led to the loss of green open spaces. Increased traffic congestion was also of great concern to people; they feel it is affecting their quality of life and feel overwhelmed by it. Also litter - people were very angry about litter. But people seem to blame others for the litter problem.

DL: What has been the response from the public to your project?

MH: There has been a good response to our information sessions and community workshops. Interest has grown over the course of the meetings. But the level of interest varies. The Howth area, for example, has a high level of environmental awareness and we got a much better response from residents there.

DL: How did you promote the project?

MH: We compiled a database of community groups and informed them all of the project. We used a variety of methods: we invited all the community groups to an official launch; we published a newsletter; we had articles in the local newspaper; we had community noticeboards in schools; and we had announcements at Mass - that proved to be the most effective way to inform people.

DL: Did people recognise that they could play a role in addressing any of these issues?

MH: One of the aims of the SEMPA project is to encourage people to take ownership of issues. But there is a legacy of people who feel cynical about public participation and feel disenfranchised from the political system. People feel that the dual mandate of politicians [ie where politicians are both council and national representatives] is a negative thing.

DL: How involved are people in community projects in the area?

MH: There are very few organised community structures and not very good networks. And there is not very good financial support for community groups. It is also very apparent that the level of involvement in community issues is much greater among older residents. It is felt that the younger people are apathetic about issues in their community. There is no new blood in any of the local groups. People are apathetic, as they feel they are not being listened to by politicians.

One of the reasons for this lack of public involvement is a lack of understanding of how local authorities and the planning process work. There is a need for a structure to encourage more open debate.

DL: Has the model for this project been used elsewhere previously, or is it a new model?

MH: The model has been used before on a project in Leicester which was also funded by LIFE. That project was more focused on the collection of data and appraisal of the environment. The SEMPA project is more about the achievement of plans. ■

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Protection for Howth

A Special Amenity Area Order protecting more than half of Howth Head was announced by the Minister for the Environment, Noel Dempsey, on May 22nd. An SAAO is made in the interests of nature conservation and amenity. Many developments which are exempt under the Planning Acts require planning permission in an SAAO. SEMPA had been seeking the order for some time. It is the third SAAO listed in Ireland; the other two are also in Dublin - on the Liffey Valley and North Bull Island.



Oireachtas Report

Dearbhala Ledwidge reports on the progress of the Wildlife (Amendment) Bill, 1999 through the houses of the Oireachtas

The Wildlife (Amendment) Bill, 1999 was referred to the Select Committee on Heritage and the Irish Language by Minister Síle de Valera on 25th May, 2000. The bill has had a slow passage through the Dáil (it has taken 10 months since its first reading to reach committee stage) and has been characterised by a lack of media coverage. The following is a brief overview of the debate. The full text is available on the Oireachtas website at: www.irlgov.ie/oireachtas

There was a general welcome for the bill by members of all parties and a consensus that the bill was long overdue. Provisions in the bill to address hunting and coursing received by far the most attention. Tony Gregory TD attacked the Minister for what appears to be amendments to, and a dilution of, measures introduced to ban hare coursing and lamping and to offer stronger protection to otters.

The minister refuted claims that she had capitulated to the hunting lobby, saying she did her best to ensure that the bill was "balanced and measured" and that she "took great care to ensure there was ongoing consultation with all groups who sought it."

The issue of lack of resources to implement many of the provisions of the bill was raised by a number of politicians. Jimmy Deenihan TD called for an assessment of the resources and management structures required for the effective implementation of the legislation without which, he said, "the legislation is unlikely to lead to a substantial benefit for Irish heritage."

The measure to change the date of hedgerow cutting from the 15th April to 1st April was broadly welcomed. However, a number of ministers mentioned the need for legislation like that found in Britain to provide protection for hedgerows. The minister acknowledged that the bill was not intended to protect hedgerows per se. However, she stated that she would, in conjunction with the Minister for the Environment, examine the possibility of taking measures to protect hedgerows via planning regulations.

(More updates on environmental legislation in next issue)

Polluters to pay more



New EU laws on environmental liability will result in much increased liability for polluters. Dawn Slevin of KT Cullen & Co Ltd (a Dublin-based environmental consultancy) reports on some important aspects of the recently adopted EU White Paper on Environmental Liability

The White Paper on Environmental Liability adopted by the European Commission in February, and its imminent transferral into EU law, will result in increased liability for polluters, far beyond what presently exists.

Environmental liability aims at making the causer of environmental damage (*ie* the polluter) pay for remedying the damage that he has caused. Without liability, failure to comply with existing environmental regulations may only result in administrative or penal sanctions. With liability, polluters also face the prospect of having to pay for restoration or compensation of the damage they have caused. The new environmental liability regime will implement the preventative, precautionary and 'polluter pays' principles of the EC treaty and ensure that the costs of restoration are shouldered by the polluter.

When the paper is adopted into law, member states will be required to integrate the new measures into their existing environmental legislation - such as laws on discharges and emissions; prevention and control of accidents; handling, treatment, and storage of hazardous and other wastes; biotechnology; transport of dangerous substances; habitats and wildlife regulations; and legislation on fishery activities.

Not all forms of environmental damage can be remedied through liability. For the liability regime to be effective, the polluter must be identifiable; the damage needs to be concrete and quantifiable; a causal link needs to be established between the damage and the polluter; and damage must result from a point source (if a polluter is responsible for 1% of the damage - as in the case of emissions from traffic - he is not liable).

Scope of the regime

Two separate approaches will be used to implement the regime:

- (i)** The dangerous activities approach, which focuses on activities that lead to environmental damage, and for which liability is strict (strict liability means that the fault of the actor need not be established, only the fact that an act caused the damage is needed). This approach applies to traditional damage (damage to persons and goods), contaminated sites, and site biodiversity, and is triggered by contamination concentrations and other traditional standards.
- (ii)** The non-dangerous activities approach, which focuses on the damage caused, is wider

in scope and liability is fault-based. (Fault-based liability means that the fault of the actor must also be established). This approach applies to damage caused to biodiversity and natural resources. The triggers for action might be (i) is the damage measurable; (ii) are there changes in growth and reproductivity of species; and (iii) is there a change in human usage as a result of damage. The restoration should lead to the return of baseline conditions.

The liability regime will not apply retroactively - and it will be up to member states to deal with pollution from the past

(*ie* pollution that occurred before the adoption of the liability regime). It will therefore be advantageous to potential polluters to establish baseline conditions prior to the regime enactment. For the simple reason that if a polluter insists their pollution is of a historic nature (in order to escape a strict liability regime) they may have to prove it, and this would prove far more expensive than completing a baseline assessment.

In addition, as biodiversity and natural resources are to be covered by the regime, access to justice for the general public is to be expanded. An important legal instrument in this field is the Arrhus Convention.

Financial security

Insurance is known to be the most effective form of financial security available to the potential polluter. (Other forms include bank guarantees, bonds, internal and external reserves). Insurance is, however, deemed to be important to ensure that the goals of the environmental liability regime are reached. As the regime requires the costly reinstatement of environmental conditions, *eg* damage to natural resources, the polluter may not have the necessary financial resources. Insurance reduces the risks companies are exposed to by transferring them to their insurers, and they then have no excuse for avoiding their financial responsibilities.

Conclusions

The White Paper on Environmental Liability is one of the most cohesive steps taken by the European Commission to ensure that not only are polluters identified, but are made to pay for and restore the damage they caused. Such damage includes traditional types of damage as well as natural resource damage. The significance of the latter should not be underestimated, as responsibility for natural resource damage is, to the polluter, the equivalent of opening a very big can of worms. In order to ensure that the regime's framework directive is not watered down by specialist interest parties, it is beholden on all of us to educate ourselves regarding the full implications of the paper's proposals and respond to the Commission's request for discussion and comment before July 1, 2000. Comments or queries can be directed to Carla.DEVRIES@cec.eu.int ■

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Aspects of the White Paper

- The White Paper covers both environmental damage (site contamination and harm to biodiversity) and traditional damage (harm to health and body).
- It has a closed scope of application linked to EC environmental law; *ie* contamination and traditional damage is covered only if caused by an EC-regulated hazardous activity, and damage to biodiversity applies only if protected under the Natura 2000 network.
- Strict liability is applied for damage caused by dangerous activities; while fault-based liability is applied for damage to biodiversity caused by non-dangerous activity.
- Liability is focussed on the operator. National laws can, however, penetrate the corporate veil and pursue parent companies.
- There is some alleviation of the plaintiff's burden of proof, and some equitable relief for defendants.
- Apportionment of liability will be mitigated joint and several (*ie* responsible parties will be held jointly and severally responsible, and the burden will be on individual parties to prove they aren't solely to blame).
- Access to justice is expanded for interest groups.
- There is an obligation to spend compensation paid by the polluter on environmental restoration.
- Financial security, such as insurance, for potential liabilities will be required.

The ESAI recognises the importance of Continuing Professional Development for its members, particularly in the light of current moves to establish professional membership for the association. This is the first in an occasional series of articles focusing on continuing professional development courses of interest to environmental scientists or those wishing to develop skills in this area

Continuing Professional Development

The Open University in Ireland offers a wide range of courses for keeping up with environmental changes, writes Dr Arlane Hunter



To help you stay up-to-date with current scientific and technological innovations as well as the latest developments in national and international environmental policies, the Open University in Ireland (OU) offers a wide range of environmental courses. These can be studied as stand-alone modules or as part of our undergraduate and postgraduate diplomas and degrees.

Studying with the OU provides a method by which to pursue continuing professional development. In addition, many of the environmental courses, diplomas and degrees can be used to fulfil the academic requirement needed for membership of a wide range of professional environmental institutes.

The environmental courses have been subdivided into two main strands - Environmental Sciences and Environmental Studies. It is possible to take courses from either or both strands.

The ENVIRONMENTAL SCIENCES strand: Investigates natural processes and components of the planet. Looks at how different biological, chemical, geological and technological components interact with each other and influence environmental changes. Some examples of the courses that make up this strand include:

Physical Resources and the Environment: Defines what physical resources are, and investigates the economic constraints of when and how we use them (including aggregates, building materials, water, and sustainable and non-renewable energy). Looks at the wider aspects of resource exploitation and the related environmental consequences.

Ecology: This course provides some of the theoretical and practical skills needed to become a professional ecologist.

Science Matters: Mainly for people interested in how scientific facts and opinions are presented to the public. Provides the skills needed to make informed, well-constructed judgements about environmental issues such as climate change, genetic engineering, etc.

The ENVIRONMENTAL STUDIES strand: Examines the relationships between human activities and the environment, focussing on topics such as land management and the development of environmental policies. Some examples of the courses that make up this strand include:

Environmental Control and Public Health: This course focuses on environmental and pollution management and provides an introduction to the different types of environmental legislation.

Environmental Policy in an International Context: Deals with issues such as hazardous waste, tropical deforestation, climate change and loss of biodiversity. Also examines how far international action can achieve sustainable development, and in whose interest this is taken.

Environment: This course is for people who want to develop a more general understanding of all aspects of the environment, including important topical social, scientific and technological issues. It will expand a student's ability to analyse their causes and consequences, and consider what actions should be taken, on the local and global scales.

All OU environmental courses can be counted towards a range of undergraduate diplomas (eg Pollution Control, Environmental Sciences, Environmental Policy and Development) as well as BSc and BA degrees. Advanced diplomas, postgraduate diplomas, an MSc in Environmental Decision-making and an MA in Environment, Policy and Society are also available.

Studying with OU in Ireland

There are no entry requirements for our undergraduate courses, although a degree is necessary if you want to study any postgraduate course. As well as being assigned your own tutor, all courses are supported by a series of non-compulsory tutorials, based at centres in Ireland, with additional day-schools and field-trips associated with some courses. There is no time limit on how quickly you must complete your studies when working towards either a diploma or a degree. Most courses are studied over an 8-month period. A student should expect to spend 8 hours of study per week for a 30pt course and 16 hours for a 60pt course. ■

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Table

Part of science degree	Extra-curricular
Basic understanding of environment & ecology	Work experience
Fieldwork skills/experience	Writing experience
Literature searches	Languages
Writing reports, use of word-processors	Full driver's licence
Use of spreadsheets and database	Email and web pages
Data analysis and interpretation	Health & safety regs
Use of GIS systems	Teamworking
Working to tight time schedules	Communication & networking skills

Examples of skills an environmental scientist would require for professional consultancy. A self-employed scientist would require additional skills in financial management

Short course

"POPs, PAHs, Pesticides and other Organics in Water"

13-14 June 2000, Trinity College, Dublin. Short introduction to organic pollutants in water, and its analysis, targeted at environmental professionals. Includes hands-on session in trace analysis of caffeine, a tracer for manmade pollution.

• Contact: Dr Vera Thoss, Department of Chemistry, Trinity College Dublin, Dublin 2 Tel: (01) 608 1600 (direct)
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What have you to say?

Compiled by Dearbhala Ledwidge

Members rank water protection as top priority

Feedback from ESAI members on the recent EPA's Environmental Research Questionnaire showed that members regard the need for further research on protection of water resources as the top priority. The most important environmental issues requiring further research were ranked as follows:

- Protection of water resources from further deterioration
- Waste management
- Land-use and habitat conservation
- Factors indicating or contributing to climate change
- How to effect change in people's attitudes to the environment.

Submission on Wildlife Bill

In its submission to government on the Wildlife (Amendment) Bill, 1999 (see also *Oireachtas Report*, p4), the ESAI acknowledged the breadth of the bill and its recognition of the importance of the natural environment.

The ESAI suggested that some aspects of the bill should be clarified. In particular, it should be made clear that local authorities would be bound by the bill and that no works should be exempt by virtue of their being executed by a central or local authority. The ESAI also pointed out that it should be clearly stated that where any works damage the nature conservation status of an SAC, SPA or NHA, clear steps to minimise this damage would have to be undertaken, restoration measures implemented and compensatory measures put in place.

It was deemed appropriate that NHAs be designated under this bill and that any planning developments which may affect them should have both consultation and formal approval from the Dept of Arts, Heritage, Gaeltacht and the Islands.

The ESAI recommended a thorough assessment of the resource implications of the bill so that its implementation would not be delayed.

Note: Members can contribute to ESAI submissions by subscribing to the listserver ENVIRONET. Just send an email to: listserv@listserv.heanet.ie containing the message SUBSCRIBE ESAI <first name> <surname> in the text (and no other information).

AGM report

There was a low turn-out of ESAI members for the Annual General Meeting, held during the Colloquium at Jordanstown in January. The full AGM report will be published at the next AGM, to be held at *ENVIRON 2001* next January.

In the meantime, it will be of interest to members to note that there was overwhelming agreement that the council should continue with progress to establish professional membership for ESAI. Developments on the progression of professional membership will be reported in future issues of *Environews*. Watch this space.

Award winners, ENVIRON 2000

The poster competition at *ENVIRON 2000* was won by Maeve Flynn from Cork. Maeve, a Walsh Fellowship Student at the Royal College of Surgeons, prepared a poster on the "Breeding Birds of Hedgerows on a Selection of Farms in Cos Wexford and Offaly." The competition for best oral presentation was won by Barbara Fogarty of the Dept of Applied Science, Limerick Institute of Technology, with a presentation on "Development of a novel method for the analysis of Oestrogen mimickers using capillary electrophoresis."



Pictured at presentation of *ENVIRON 2000* Poster Display Award in University of Ulster, Jordanstown in January (L to R): Dr Brian Eggins, UUJ; Jim Bingham, Mayor of Newtownabbey; Maeve Flynn, winner; and Isobel Bingham, Mayoress of Newtownabbey.

In Brief

ESAI Workshop

Mary Brennan, ESAI Secretary

The ESAI will be holding its annual workshop close to Science Week in November. The council would like to know which of the following workshop themes would most interest members and why:

- Specific waste issues
- Biodiversity
- Other topics

Your replies will be considered at the council meeting on June 10th and a decision taken. We shall then seek a host for the workshop, and speakers. Please reply to: mary.brennan@lyit.ie

ENVIRON 2001

ENVIRON 2001, the 11th Irish Environmental Researchers Colloquium, will be hosted by Dublin City University on Friday and Saturday, January 26th-27th, 2001.

The meeting will be held in the Biotechnology and Chemical Sciences Building. Paper and poster presentations will be held on both days. The ESAI Environmental Scientist Award will be presented on Saturday evening.

• For details contact: Dr Brid Quilty, School of Biotechnology, Dublin City University, Dublin 9
Tel: (01) 704 5388 Fax: (01) 704 5412 Email: brid.quilty@dcu.ie

ENVIRON 2000 abstracts

Copies of the abstracts from *ENVIRON 2000* are available by sending £5 Sterling to: Dr Brian R Eggins, School of Biological and Chemical Sciences, The University of Ulster at Jordanstown, Newtownabbey, Co Antrim BT37 0QB Northern Ireland
Tel: +44 (0)28 9036 6113
Email: BR.Eggins@ulst.ac.uk

New ESAI Council

The ESAI would like to thank outgoing council members Theresa Doyle, Julian Aherne, Owen Carton and Grace O'Donovan for their contributions and availability for dealing with council matters whenever necessary. The council would also like to welcome new council members Richenda Garland, Debbie Chapman, Patricia Byrne and Teresa Curtin. See page 2 for details of council officers for year 2000.

Damselfly sought

Markus Rantala of Finland is studying immunocompetence and sexually-selected ornaments in the damselfly *Calopteryx splendens*. He has been collecting specimens from all over Europe and is interested in obtaining some from Ireland. He would be grateful for any assistance.

• Please contact: Markus Rantala
Department of Biological and Environmental Science
University of Jyväskylä, Finland
Email: marrant@dodo.jyu.fi

10 million years for species to recover

Interesting analysis of fossil records (largely marine species) by Kirchner & Weil [200, *Nature* 404, pp177-180] found that on average it takes about 10 million years for the number of species to recover after extinctions (not mass extinctions). One wonders if the human species will survive long enough to see diversity recover from the impacts of 19-21st century man.

Nature listserver

Nature Ireland is an email discussion list for people interested in nature and environmental issues. Set up by Justin Ivory and Brian Rooney, it welcomes discussion, debate and information-sharing and carries messages from conservation NGOs. It also features "Nature in the News," a daily digest of nature and wildlife news stories from *The Irish Times*, *The Examiner*, *The Farmers Journal*, etc, and compiled by John Coveney. To subscribe, send a blank email to:
natureireland-subscribe@egroups.com
To post a message to the list members, you send an email to:
natureireland@egroups.com

Seafood website

Website: www.irishseafood.com
Email: info@irishseafood.com
With exporters, processors, 'buy and sell' notices, company profiles, newsletter, fish prices, links.
Contact: Declan Connolly,
Directory of the Irish Seafood Industry Tel: (091) 637500

LISTINGS

Conferences

4th International Conference on Water Supply and Water Quality

September 11-13, 2000, Krakow, Poland.
This year's conference - in the European City of Culture 2000 - will challenge the most important issues facing the water industry today. With papers from over 40 countries, assembled in 30 sessions, the conference will cap the past and look into the future of water quality, treatment, distribution and pricing. Conference chair: Prof Jan Oleszkiewicz of University of Manitoba. The sessions will be chaired by distinguished names in the water industry, chosen from the Scientific Committee and the contributing authors. The International Water Association will publish the best papers in the journal *Water Supply*.
• Contact: Adam Kalucki, Organising Secretary, LEM PROJEKT, ul. Grodzka 1, 31-006 Krakow, Poland Tel: +48 12 423 08 55 or +48 12 423 08 61 Fax: +48 12 421 81 99
Email: office@lemprojekt.com.pl
Website: www.lemprojekt.com.pl/water2000

Workshop on Comparative Radiobiology & Protection of the Environment

Saturday-Tuesday, 21-24 October 2000; Dublin Institute of Technology, Kevin St, Dublin 8.
This workshop will discuss:
(i) the state of our knowledge about radiation effects in wild species of plants and animals
(ii) universal mechanistic endpoints which could allow the establishment of a "sensitivity scale"
(iii) a framework for radiation protection of species other than man.

The workshop will facilitate discussion and avoid formal talks. Proceedings will be published. Submission of abstracts and posters is encouraged. IRE70 registration fee (incl social events). Max no of participants 40. Accommodation reserved in the Stakis Hotel, near the Institute.
• Contact: Dr Carmel Mothersill, Radiation and Environmental Science Centre, Dublin Institute of Technology, Kevin St, Dublin 8
Tel: (01) 4024665 Fax: (01) 4756793
Email: cmothersill@rsc.iol.ie

Marine protected areas in the UK

15-16 November, 2000; Edinburgh.
Organised by the UK Marine SACs Project.
This conference aims to:
- review the achievements of the last four years in establishing management on UK marine SACs
- consider the priorities for future action.
It is targeted at those statutory bodies, user and interest groups with close involvement in the management/use of these sites in UK/Europe.
• Contact: John Torlesse
Email: john.torlesse@english-nature.org.uk

Aquatic habitats as ecological islands

Tuesday-Thursday, 5-7 September 2000
This will be a joint meeting between the Aquatic Ecology Group of the BES, the Marine Biological Association and the Freshwater Biological Association on the above theme. It will be held at the Robbins conference centre at University of Plymouth. For details on the call for papers, registration and accommodation, visit the website:
www.biology.plymouth.ac.uk/BES/

Websites

Houses of the Oireachtas

www.irlgov.ie/oireachtas
This website covers all aspects of the Irish parliament. It includes a weekly schedule of events in the Oireachtas and the text of all Dáil and Seanad parliamentary debates since 1997. A useful site for following the passage of bills through the Oireachtas.

Society of Expert Witnesses

www.sew.org.uk/
The Society of Expert Witnesses is an independent non-profit-making body run by expert witnesses for expert witnesses. Their website contains a database of expert witnesses, conference news and an archive of society reports. A useful site for environmental scientists who may appear as expert witnesses.

UK Marine SACs

www.english-nature.org.uk/uk-marine/
The aim of this project is to establish management schemes on selected UK marine SACs. This excellent website has access to the UK report (pdf format) and includes guidelines for water quality management within marine SACs, impacts of fisheries, coastal biotopes, etc.

Chemical Awareness

www.dn.dk/chemaware/current/current.html
Chemical Awareness aims to strengthen NGO networking on chemicals policy in the EU and improve understanding of what is going on in member states. Send an article to *Chemical Awareness* with your views and thoughts.
Email: chemaware@dn.dk

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