HERPETOFAUNA RECORDERS' MEETING

7.1 Introduction and objectives

Leicester Polytechnic has been host to the Herpetofauna Recorders' Meeting since 1987. Since the start of the "Herptile Sites" project this has been a contractual obligation.

Four main objectives have been served by the annual conference. The first has been to provide a national forum for the sharing of views and experiences relating to herpetofaunal conservation and survey within the UK. Secondly, we have attempted to disseminate relevant herpetological research information to this largely non-scientific audience. Many delegates to the meetings, otherwise unlikely to be in contact with scientific literature, are nevertheless interested in the ecological basis for practical conservation advice. The third function has been to publicise new survey initiatives and to inform recorders of the progress of the national surveys. The fourth, and arguably the most important, has been the bringing together of recorders from throughout Britain to meet and discuss issues of mutual interest, not necessarily across the conference floor. Many contributors to the national survey work alone and enjoy this opportunity to talk to other likeminded individuals.

7.2 Conference organisation

Since 1990, conferences have been held at De Montfort University (formerly Leicester Polytechnic) during the first or second week in February. This winter date gave surveyors and researchers time to collate their previous year's data, but did not impinge too much on the current amphibian breeding season. The meetings were advertised the previous autumn when individuals and organisations on the mailing list were offered the opportunity to present talks, latterly on selected themes

(Appendix 32). Titles received by the end of November were then organised into programmes which were distributed before Christmas. Each year enough talks were proffered to fill a day's programme without having to turn many people down. In 1991 and 1992 specific themes were suggested in order to provide structure and direction for the days' discussions. Delegates were also given the opportunity to present posters or displays in the university foyer, which formed part of the focus for discussion during refreshment breaks.

For each conference we attempted to strike a balance between professional and amateur contributions in order firstly to air alternative viewpoints and objectives and thus stimulate discussion and dialogue between groups; and secondly, to mix experienced with inexperienced public speakers. In the event, some lively debates ensued and the standard of talk presentation from almost every source was high, generally holding the audience's attention throughout the day.

7.3 Finance

Annually, English Nature contributed £500 to the running of the event, which sum approximately covered the hire of the lecture hall and the printing of programmes. This left the cost of catering, postage, hire and transport of equipment (such as projection screens and display boards), extra photocopying, the employment of temporary assistants plus stationery sundries to be met from the conference fees. The charge was calculated as the minimum fee necessary to break even with 100 delegates; we attempted to maintain the lowest possible charge each year. Unfortunately, catering and hall hire charges rose substantially during the three year period, thus necessitating higher annual fee increases than we would have wished. Numbers did not apparently decline as a result, but we did feel that the £20 fee for the 1992 meeting probably approached the limit that individuals unable to claim expenses were prepared to pay. To lose the support of these people would be to defeat the object of the exercise.

Each year, delegates numbered between 130 and 160, but of those about thirty were non-payers - speakers, chairmen and helpers. Speakers were offered travelling expenses (but not overnight accommodation costs), which also had to be found from the day's takings. Discretionary discounts were also given to individuals or parties - for example, groups of school children, or journalists who would provide wider survey publicity. As sandwiches were not allowed to be consumed on the premises at weekends, the fees included a mid-day meal as well as morning coffee and afternoon tea. Due to the distance of Scraptoft Campus from Leicester city centre, transport was provided to and from the railway and bus stations.

7.4 Meeting reports

7.4.1 1990

On 10th February 1990, the National Amphibian Survey was host to 137 delegates. This was the first year in which all individuals on the mailing list had been invited to submit talk proposals. Sixteen suggestions were received, of which 13 were presented at the meeting. The speakers, talk titles and session themes are listed in the conference programme (Appendix 33).

The day opened with a brief resume of the success and shortcomings of the three year NCC Amphibian Communities Project, by Mary Swan. In the talk she emphasised the need for further surveying and pinpointed counties where lack of data was particularly acute. As one of the main aims of the 1990 meeting was to launch the NCC Common Reptile Survey, this was introduced in the opening presentation, and expanded upon in the afternoon reptile session.

After the hosts' opening presentation, the first session explored the role of several conservation and countryside organisations in herpetological conservation. The speakers were Keith Alexander of the National Trust, Andrew Heaton of the National Rivers Authority and Brian Banks of the British

Herpetological Society (BHS). The morning concluded with a frank discussion of the efficacy and shortfalls of current species conservation legislation, led by Ruth Briggs of NCC and Trevor Beebee of Sussex University.

The second session, opening the afternoon, dwelt on three aspects of reptile interest. Basic reptile survey methodology was clearly outlined by Howard Inns of BHS, a useful and interesting talk which should have inspired a few listeners to participate in the reptile survey. The value of basic ecological research was illustrated by a sand lizard study on Merseyside described by Arnold Cooke of NCC; and the practical applications of both survey and research were demonstrated by the history of the reintroduction of sand lizards into the New Forest, told by Martin Noble of the Forestry Commission.

"Local surveys" was the theme of the third session, in which the organisation and results of two extensive surveys in south east England were described by Deryck Frazer and Julia Wycherley. These were followed by an optimistic account of the amelioration of large scale development plans on the outskirts of Worcester, in the light of thorough environmental (including amphibian) surveys. This presentation, given by Will Watson, effectively demonstrated the value of documenting local countryside resources.

The final session covered aspects of survey methodology. Rick Parker of the Greater Manchester Great Crested Newt Group described and evaluated the use of crested newt egg searches as a survey method. Richard Griffiths, outlining again the importance of scientific research, explained how the differing ecologies of the three newt species may determine the relative usefulness of various surveying techniques.

The meeting concluded by introducing other delegates currently carrying out herpetological ecology research in Britain, to the audience. At the time, at least eight universities and polytechnics were revealed to be undertaking conservation research projects involving UK amphibians and reptiles.

7.4.2 1991

The 1991 meeting publicity again took the form of a circular, inviting spoken and poster contributions to the meeting from those on the mailing list. This year, the leaflet was also inserted in the autumn edition of the BHS Bulletin (Appendix 32).

The meeting, held on 2nd February 1991 was attended by about 140 delegates. Organisations represented included NCC, the county wildlife trusts, the Forestry Commission, biological record centres, BHS and several environmental consultancies. See Appendix 33 for the meeting programme.

The first of the meeting's two themes, "Habitat Management", investigated herpetofaunal site manipulation for the purposes of conservation, education, and land development.

Management of the aquatic and terrestrial habitats of *Bufo* calamita purely for conservation was described by Brian Banks and Jonathan Denton respectively. The results of their scientific studies have shown that certain management regimes favour natterjack survival in populations facing competition from the common toad; eg natterjacks are found more frequently on bare ground, whereas common toads favour better vegetated scrubby areas - thus scrub encroachment should be prevented on natterjack reserves.

Amphibian site and population manipulations in the face of road and housing developments were described by Nick Gibbons and Arnold Cooke respectively. The first talk catalogued the rescue of a toad population and a series of subsequent crises precipitated by the construction of a town by-pass, spanning a three-year period. The second reported the conservation and enhancement of a crested newt site within a residential development, following the fate of the newts over several years. Both talks emphasised that although amphibian populations had been conserved, the sites had subsequently required continued monitoring, vigilance and maintenance. That

conservation and education can both be served by the creation and management of ponds within schools was the message of both Gareth Evans, headmaster of a private establishment with extensive rural grounds, and Jan Clemons, a teacher in a town comprehensive with limited open space. Both talks certainly served to encourage other school teachers to embark on similar enterprises.

The incorporation of the knowledge of experts into computer systems was described by Rob Oldham and Mark Jeffcote. Their "Expert System", developed to aid crested newt site management, was demonstrated by taking the audience through the programme by projecting the decision-making steps onto a large screen.

Two of the speakers in the "management" sessions, Paul Edgar and Tom Langton, were unable to attend.

The second theme for the meeting was "The Aliens", in which the colonising success of several introduced species in Britain were reviewed. A resume of herpetological introductions was given by Leigh Gillett, and the potential for settlement of various species in Scotland was explored by Frank Bowles. The status of the wall lizard and the pool frog, two species with very restricted distributions yet apparently holding their own, were described by Graham Walters and John Buckley respectively. The progress of a species whose range is currently expanding, the midwife toad, was reported by Helen Muir-Howie. Tony Gent ended the session by stating the views of NCC. He intimated that although the organisation had previously ignored he presence of "exotics", an official policy was now needed; indeed, there may even be a case for the protection of species recognised as endangered in their countries of origin.

An independent review of the meeting proceedings is provided by Banks (1991).

7.4.3 1992

The themes of the 1992 meeting were "Translocation and Introduction", suggested by the conference organisers; and "herpetological conservation issues in the 1990s", covering most of the other the topics raised by delegates. As in 1991, notice of the meeting was distributed through the survey mailing list, and the BHS Bulletin (Appendix 32). The total number of delegates registered for the meeting, held on the 1st of February, was 171. However, due to particularly heavy fog, 19 of those failed to turn up on the day. This year, along with English Nature, the County Trusts, Forestry Commission and several environmental consultancies, local council planning departments were also represented amongst the delegates. See Appendix 33 for the meeting programme.

Following the annual national survey update given by Mary Swan, the first session on "Translocation and introduction" opened with Rob Oldham's report on the documentation and evaluation of licensed crested newt translocations. He reported that monitoring subsequent to the translocations had not been carried out in most cases, and of those which had been followed up, few translocated populations could be described as flourishing. In most instances, failures could have been predicted. Chris Monk then gave an illustration of some of the practical problems experienced in Derbyshire by individuals attempting rescue crested newt crested newt populations by translocation. On a more optimistic note, Bob Bray described a programme of amphibian habitat creation and subsequent crested newt rearing and reintroduction onto reclaimed opencast land.

Two short talks illustrating specific but useful ecological points were presented by Will Watson and John Baker. Will described the dismantling of a pile of building rubble during the summer of 1991 which was shown to be sheltering over fifty crested newts. This demonstrated that often disregarded features must be considered as potentially significant components of newt terrestrial habitat. John revealed that the

survival rate of laboratory reared newts released into a wild population was lower than their wild-reared counterparts; he concluded that familiarity with the surrounding terrestrial habitat may have been a significant factor. Tony Gent discussed the value of translocations to nature conservation, considering both local, national and humanitarian perspectives.

Session two was opened by Jonathan Denton describing his work in relation to the natterjack toad species recovery plan. He discussed the potential for future natterjack success at sites from which the species is presently absent, but for which previous records exist. A successful method of natterjack toad introduction and translocation has been developed, as described by John Buckley.

Translocations and introductions of rare reptiles have been carried out in southern England for many years under the auspices of the BHS Conservation Committee, and now also through the Herpetological Conservation Trust. Paul Edgar reported the objectives and results of such manipulations. Success in terms of species persistence is easier to assess than changes in population levels, especially when some of the species, such as the smooth snake, are relatively long-lived. Translocation of the more widespread viviparous lizard was described by Tom Langton, who illustrated the intensive nature of the task, but that the procedure is, nevertheless, feasible. Jan Clemons returned to report the development of her school's continued involvement with herpetology. This year she was accompanied by two pupils, Louise Dillon and Kimberley Marvell, who presented most of the talk. As well as the construction of the pond, described last year, Rugby High School have now created a reptile vivarium, (complete with translocated heathland vegetation retrieved from a Dorset heath in the course of being "developed") in which slow worms and viviparous lizards appear to be thriving.

For the final session, the organisers had persuaded experts in their fields to talk about the most popular topics suggested

by the delegates. Trevor Beebee discussing "global amphibian declines" pointed out that in western Europe, other taxa may be under just as much, if not more pressure, than amphibians; he was on the whole sceptical of the concept. Clive Cummins reported that in the laboratory, amphibians had been shown to exhibit sensitivity to low pH levels. However, in order to assess the impact of acid rain in the field, attention had to be paid to the species' ecologies and behaviour which may at different stages of the life cycle either reduce or increase actual exposure to acid conditions.

Difficulties in assessing the impact of water abstraction on wetland habitats were illustrated by Paul Jose of English Nature. Prediction is dependent on identifying sources of surface water, and knowing the effects of underlying geological structure on its movement. Brian Banks reported that wildlife legislation has had varying degrees of success in protecting natterjack sites; failure in some cases due to landowners being unaware of the presence of the toads on their land. The law has not proved to be a panacea, but has had a positive beneficial effect. Keith Corbett first addressed the recorders' meeting in 1990, when swathes of lowland heathland were being destroyed, little heed being paid to the national and international importance of the habitat resource. This year however, the situation is more optimistic, proposed encroachments on Dorset heathland by housing developments having recently been prevented by the Secretary of State. Keith voiced the hope that what little remains of this unique habitat is now relatively secure.

7.5 The future of the meetings

Each year, the meetings and their pre-publicity have highlighted issues concerning British herpetofauna. Continued high attendance levels have indicated that in herpetological and conservation circles there is a recognised need to be kept abreast of national developments, and aware of common local issues. The meetings also provide a forum for the dissemination of current survey methodologies and the results

of research pinpointing effective practical conservation measures.

We therefore maintain that the annual conference is an effective vehicle for the promotion of herpetofaunal conservation in the UK.

CHAPTER 8

COUNTRY AGENCY SUPPORT

8.1 Introduction

Since 1983, Leicester Polytechnic has been contracted to provide country agency personnel with advice and support on herpetological matters. The form and extent of our involvement with NCC casework is reported below.

8.2 Provision of information

The country agencies may require to interrogate the national site databases in order to confirm, or otherwise, species' (usually crested newt) presence in threatened sites. However, as only a small proportion of the country's small water-bodies have been surveyed, the database is not a definitive site catalogue and may be of limited use in assessing specific ponds. Nevertheless, there is sufficient information to make an assessment of the status of each species within most counties and to assign relative conservation values to sites. Viewing sites in relation to the national database allows them to be set in context, as local, regional or national resources. For example small populations ranked as insignificant on a national scale may assume considerable importance if the species is identified as being locally rare. Conversely, if species "hot spots", (where populations occur frequently or at high density), are recognised as a significant national resource, then this may prevent the loss of important sites, perceived as having little conservation value locally.

As a centre involved not only in survey coordination, but also field-based ecological research, we could also advise on practical management and study techniques. It was therefore disappointing that so few country agency personnel availed themselves of the information that we could provide. We were aware of significant numbers of applications to English Nature

for crested newt translocation licenses, but were seldom consulted as to the advisability of the proposed action. A useful note advising on appropriate responses to site threats was produced by Arnold Cooke for regional staff in 1987. However, a questionnaire circulated by him in 1990 showed that although over 70% of staff knew of it, few consulted it in response to planning proposals. In his subsequent circulation of the questionnaire survey results, Dr Cooke advised country agency staff to contact Leicester for herpetological information. This also drew little response.

Over the three years of the contract, approximately 12 database interrogations were carried out on behalf of EN personnel, with respect to threatened ponds, most of them in EM region. Overall, information was requested for Bedfordshire, Buckinghamshire, Cambridgeshire, Derbyshire, Leicestershire, Lincolnshire, Borders and Lothian Regions. Six requests for local herpetological contacts were received, from E and W Midlands (EN regions), Fife, Northumberland and Wiltshire, and a national herpetofauna recorder list was provided for EN headquarters staff. Nine site visits, six of them nocturnal, were made on behalf of English Nature.

CHAPTER 9

TRANSFER OF DATA TO THE BIOLOGICAL RECORDS CENTRE

As part of the current three year project, De Montfort University was contracted to transfer all the herpetological survey records collected during the nine years of NCC survey (1983 to 1992) to the National Biological Records Centre at Monks Wood. The national survey data will contribute significantly to the new BRC herpetological atlas of the British Isles, currently scheduled for production during 1993.

In order to test the feasibility of data exportation to BRC by floppy disk, a sample of national survey information was imported into the Monks Wood database in 1991. No transfer problems were encountered although some data editing will be required.

A total of approximately 16,000 items of data have now been transferred to BRC comprising 11,000 amphibian survey and 5,000 reptile survey site locations. The species distribution maps in Chapter 3 of this volume (Volume 1 - amphibians), and Chapter 2 of Volume 2 (reptiles), were kindly produced by Henry Arnold of BRC Monks Wood using the national survey data.