

THE COLEOPTERIST'S NEWSLETTER

Number 18

November 1984

Philonthus pullus Nor. IN S.WALES - David Copestake has asked me to correct an error in his article on beetles at Merthyr Mawr Warren SSSI (Newsletter No.16:5). For "P.pullus was taken a year ago" read "was taken by Tomlin over 80 years ago" (during 1898 to be precise) and is recorded in the "Coleoptera of Glamorgan" (Transaction of the Cardiff Naturalist's Society, 46:29 (1913)).

Since the publication of David's note I have discovered a good colony of Philonthus pullus in a damp dune slack at Oxwich NNR on the Gower. They were most plentiful under stones near Juncus tussocks but a few were observed at the roots of grass and other plants.

P.J.Hodge.

COLEOPTERA FROM FAGGOTS - A POSTSCRIPT - I recently commented (Newsletter 14:2) that I had taken what was "almost certainly" a female example of Corticaria alleni Johnson from faggots in Suffolk. I stated, however, that the habitat appeared atypical for that species. Subsequent critical examination showed that my caution and suspicions were justified when my friend Colin Johnson determined it as Corticaria fagi Wollaston. A note for publication is in preparation.

D.R.Nash.

TACHYPORUS - A NEW KEY Published recently in "Circaea vol.2(1) May 1984 pages 15-19 by Roger Booth. It relies upon elytral chaetotaxy far more precise than the traditional characters. Copies can be had from Roger (send sae too) at Dept. of Biology, University of York, YO1 5DD

THE NATIONAL BUTTERFLY MUSEUM SALE, OCTOBER 1983 - Members may have read in the Bulletin of the Amateur Entomologists' Society volume 43(342):19-23 (February 1984) observations on the above sale held at St. Mary's, Bramber in October 1983 and noted the reference to British Beetles on page 21.

This refers to lots 922, 923 and 924 namely the G.R. Sutton Collection of British Beetles, and lots 925, 926, 927, 928 and 929 comprising Dr R.M.P. Clark's Collection of British Beetles.

Of these Glasgow Museum purchased lots 922 and 923 of the G.R. Sutton Collection including Dytiscus, Carabus, Lucanus Prionus etc and material from J. Chappell (Manchester), Janson (New Forest 1896), Higlett (Harringay 1907), T. Smith (Richmond Park 1897) and some 50 specimens collected by D. Wright in 1972. We also purchased Dr R.M.P. Clark's collection. Since this date, duplicates of approximately 130 species from the Clark Collection have been transferred to Dundee Museum. In addition to the Coleoptera, Glasgow Museum also purchased several lots of foreign Lepidoptera including Types, and the H.D. Smart collection of British Hymenoptera,

If anyone knows the whereabouts of any notebooks relating to the above collections or lot 924 or can furnish biographical details on the collectors concerned for our Departmental records, I would be most grateful.

F.R. Woodward, Dept. of Natural History, Art Gallery & Museum,
Kelvingrove, Glasgow, G3 8AG

SUBSCRIPTIONS OF 1985 ARE DUE - PLEASE SEE ENCLOSED SHEET.
Prompt payment is greatly appreciated; we cannot afford to send reminders. Anyone not paying by March will be deemed as not wanting to continue their subscription.

COLLECTING THE PARASITES OF COLEOPTERA.

Beetles do not live in a vacuum, they interact in a variety of ways with other organisms: as predators, prey and in a few cases as parasites of other animals. Beetles like all other living things also have their own parasites; and it is with certain of these parasites and their beetle hosts that these notes are concerned.

As one who has a particular interest in the ecology of insects, in addition to the purely taxonomic aspect; and being by nature somewhat eclectic (ie. fond of biting off more than I can chew), the collection and study of certain insect parasites of beetles satisfies in all those respects. To attempt the study of the total array of the parasitic organisms attacking beetles, however fascinating that might be, is beyond the scope of the individual. My own study is restricted to insect parasites of beetles of the Orders Diptera and Hymenoptera. This too is a tall order, however even the collection of specimens, their careful preservation, recording, and if possible, their identification, is in itself a valuable pursuit in this comparatively little studied area.

Something like one tenth of all animal species are parasitic insects. Parasitism being usually defined as a relationship between two species: where one, the parasite, obtains its sustenance from the body of the other, the host. This is not the place to get embroiled in parasite/parasitoid/predator arguments; suffice to say that the Diptera and Hymenoptera parasites of beetles are of the kind known technically as protolean parasites (ie. only the immature stages are parasitic). In their adult stage these insects are free living and mostly feed on such substances as nectar, pollen or honeydew secreted by aphids and scale insects. These protolean parasites attack all stages of the beetle life-cycle: egg, larva, pupa and imago. Most are parasites of one family of beetles only or a single species; others, however will attack not only different species but even different orders. Thus, some Hymenoptera will attack different species, while there are Tachinid flies which parasitise Lepidoptera and will also attack larvae of Coleoptera, (van Enden, 1950).

The Tachinid Paradexodes will attack both the pre-pupal and pupal stages of Chrysomelid larvae, and some Hymenoptera parasites of beetles will attack more than one instar of beetle larvae.

Parasites probably play a part in controlling the populations of certain beetles, such as the Chrysomelidae, and they may also affect the behaviour of certain beetles. Thus, it has been suggested by Crowson (1981) that the minute Mymarid wasp Prestwichia aquatica, which attacks the eggs of Dytiscid beetles, could be a major factor favouring the migratory behaviour of certain species of Dytiscid. These Mymarids, which are approximately 1mm in length, are aquatic and swim down to the eggs, enter the egg itself and mate inside. Up to seventy individual parasites have been reared from a single Dytiscid egg.

Beetle parasites are not all the common, in the field, and their collection and study is not an easy task. It involves the rearing of large numbers of larvae (collected in the pre-pupal instars), also the collection of large numbers of pupae and even adult beetles, as some parasites choose the adult beetle as their "victim". Owing to the fact that large numbers of adult beetles are rarely kept alive for any length of time, such parasites are little known, and much interesting material waits those with the patience to maintain large numbers of adult beetles alive in captivity. In the field, keeping an eye open for likely parasitised individuals, larvae, pupae or adults might prove fruitful. Parasitised larvae tend to be more sluggish than their unparasitised brethren; also, as it is advantageous to the parasite to emerge later than the host beetles, pupae taken late in the season will tend to have higher proportion of parasitised individuals than those collected earlier in the season.

The large numbers of larvae, pupae and imagines involved in the study of parasites of beetles is a major difficulty. Phytophagous species are obviously the easiest to deal with and may be kept in large numbers with their food plants in

the cylindrical containers sold for the rearing of Lepidoptera larvae, these will hold the food plants, either in a container of water or as rooted whole plants in pots. There are disadvantages to this however; as the parasites themselves are so small that they cannot easily be located in large containers or may even escape. Also beware some of the containers sold commercially, as the plastic used may be poisonous to insects. One safe material is "Mylar" which can be purchased in sheets and cut to the required dimensions. For the base and lid, small tin lids, with holes punched for air can be used. Alternatively the small tins sold for keeping Lepidoptera larvae or pupae while collecting in the field may be very useful. Remember to cover any large holes with very fine mesh gauze to prevent the escape of the tiny parasites. Ideally small plastic lunch boxes of the transparent kind can be used, and these can be examined much more easily for parasites than the larger cages. Pupae may be kept in small plastic pill boxes, or large collecting tubes where the emerging parasites can more easily be seen and dealt with. For carnivorous species the care of larvae is much more difficult. The larvae of carnivorous beetles are notoriously finicky in their diet so it is advisable to collect as late as possible, this makes parasitisation more likely and also obviates the difficulty of too protracted a feeding period. Small amounts of chopped fly larvae or earthworms will sometimes prove acceptable, otherwise it is a case of trial and error to discover the larval food requirements. For cages, the lunch-boxes above mentioned can be used, or smaller pill boxes with holes for air made with a red-hot pin or needle. With adult beetles rearing is much less difficult. Feeding with chopped larvae or earthworm about twice a week will often prove successful (Luff, 1975). As these 'Ravenous Eaters' (Adephaga) are cannibals it is necessary to keep the larvae and adults individually in small containers, though care must be taken to maintain a balanced environment of temperature and humidity.

With regard to detritus and carrion feeders I have had little experience, but attempts to rear parasites from these species would be very rewarding. I would be most interested to hear from anyone who has reared parasites from these species of beetle. Also the large aquatic groups.

The identification of the beetle host will not prove difficult to the Coleopterist, however the identification of the parasites themselves is a different matter. For Diptera the excellent volume by Colyer & Hammond (see below) will give at least the family, also the Royal Entomological Society Handbook to the Diptera families. If you live in Wales or just outside, then Mr John Deeming of the National Museum of Wales Department of Zoology would, I am sure, be happy to identify parasitic diptera reared from hosts. The keeping of good records of site of collection, date of collection and emergence of parasite is essential as is recording the host. Such information should be put on a card and put on the pin holding parasite and host remains. The parasites can be pointed using water-soluble gum, or placed in small tubes as dry specimens. Data labels should be placed inside the tube with the specimens to avoid being misplaced or lost. With Hymenoptera the case is even more difficult. There is the key to the families of Hymenoptera in the R.E.S. Handbook Series, but for more detailed determination such works as the keys to Chalcid Wasps (below) must be consulted. Specimens may be sent to the British Museum (Natural History) Department of Entomology, and would no doubt be welcome, but bear in mind specimens sent for determination might be retained by the Museum.

To end on a conservation note. With the collection of such large amounts of larvae and pupae, it would be unforgivable to allow the many unparasitised individuals to die, or to release them hapazardly. One should always release unwanted material back into the location from whence they were collected, in accordance with the J.C.C.B.I. Code for

Insect Collecting.

References:

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Peck, O. et al 1964. Keys to the Chalcidoidea of Czechoslovakia Memoirs of the Entomological Society of Canada, 34.

Richards, O.W., 1956 Introduction and Keys to Families: Hymenoptera. Handbooks for the Identification of British Insects, Vol. VI(1) Royal Ent. Soc.

van Emden, F.I. 1950 "Dipterous Parasites of Coleoptera." Ent. Mon. Mag. 86.

D.A. Edwards, 98 Clodien Avenue, Heath, Cardiff.

ALCOHOLICS COLEOPTEROUS.

Every now and then my wife makes plum and apple jelly, I get the strained-off pulp, add some sugar and a pinch of yeast and leave it for a few days to start fermenting. Then I put it out in woods in dollops on logs and stumps and return a few days later to collect the beetles which it has attracted. Most have a blood alcohol level well above the maximum recommended for pedestrian beetles, let alone those than want to fly.

Altogether I have collected about 50 species by this means including some that I have not found any other way. In southern areas, for example, I have taken in this way Thamiarea cinnamomea, T. hospita, Carpophilus marginellus, Epurea guttata and Cryptarcha strigata whilst in the north Sphaerites glabratus, Acrulia inflata and Cetonia cuprea have been amongst those attracted.

Suspecting that many attracted beetles imbibe and stagger off before they are caught, and wishing anyway to try out the idea in an area to which I could not return for some weeks, I hung the fermenting mass in a loose net bag above a funnel to which I had attached a bottle of 70% alcohol. I was not sure whether to provide a shield from the rain which might cause the ferment to dry out or to leave the ferment exposed and risk rain washing some into the funnel. Eventually I decided on the latter and set out the trap in a Speyside pine forest.

Ten weeks later there were about 250 beetles in the bottle including examples of Phyllodrepa salicis, six species of Epurea including angustula, biguttata and silacea, Rhizophagus parvulus and Henoticus serratus.

Whether or not more readily available forms of alcohol (out of cans and bottles) would prove as attractive to beetles remains to be seen. Certainly there are plenty of interesting experiments to be done!

J.A.Owen, 8 Kingsdown Road, Epsom, Surrey, KT17 3PU

(After all that alcohol, why not visit the toilet ?)

A LEWD COLLECTING TECHNIQUE - Lavatories of old public houses can be good collecting grounds for Lathridiidae. Male collectors should certainly follow the common graffiti instruction to "Look up..... etc" since the area around the cistern and cold water pipe supplying the urinal(s) is a good place for the moulds upon which these beetles feed. The windows and sills should be carefully scrutinised as well as the area around and under the wash basin. Muck hand scrubbing is the order of the day in order to carry out an inspection without arousing undue interest from other visitors. A torch may be needed when examining behind the WC's in dark cubicles or on the walls of such cubicles.

A special check should be made of any pub visited to see if there has been any recent plastering because, as is well known, these beetles thrive on the new moulds growing on such, as yet, undried material.

Apart from 'commoners' such as Aridius bifasciatus (Rtt.), A.nodifer (Wwd.), Lathridius anthracinus Mannh., L.pseudo-minutus (Strand) and Corticaria elongata (Gyll.), rarer species also occur; I recently found several Lithostygnus serripennis Broun (new to Derbyshire) at the "Jug and Glasses" Hartington (SK1561) whilst Colin Johnson found Corticaria inconspicua Woll.

I have yet to find Lathridius minutus (L.) in this habitat although all my specimens have occurred in or near old buildings. This Lathridiid is, in my experience, decidedly syanthropic and uncommon.

Warning! Collectors of the same sex, working in pairs can get some strange knowing looks from other customers if they both suddenly get up and try to race each other to the toilets without drinking any of the liquid refreshment just ordered. Suspicious loitering in the washroom can also produce hurried exits from other customers.

(If the family disapproves, you can always argue that you have the cleanest hands of any Coleopterist known to you!)

D.R.Nash, 266 Colchester Road, Lawford, Essex, CO11 2BU

SORBY RECORD No 21 (1983) A JOURNAL OF NATURAL HISTORY FOR THE SHEFFIELD AREA (96pp). The high level of activity by Coleopterists in the Sheffield area is reflected by the large number of papers on the subject in this Journal. "A Supplementary List of Coleoptera from an Upland Pannine Valley" by Eric Smith updates his first list for the Alport Valley which appeared in the Sorby Record No.18 (1980). The total list now exceeds 500 species; the present work consists largely of Staphylinidae. "Beetles as Primary Woodland Indicators - a Preliminary attempt to provide a regional assessment of primary woodland indicator beetle species in the Sheffield area, with notes on Yorkshire and Derbyshire species" by

Steve Garland pulls together a large amount of information about these ecological indicators and includes a table of proposed gradings of rarity and indicator strength. "Ground Beetles (Carabidae) and other Coleoptera on Demolition Sites In Sheffield" by Alan Lazenby discusses the ecology of this interesting assemblage of species. Original observations of habitat preference and broods are included, as are national distribution maps of Amara convexiuscula and Bradycellus verbasci.

Published by the Sorby Natural History Society, Sheffield, copies are available from: D.Whiteley, 730 Ecclesall Road, Sheffield, S11 8TB at £1.25p + 35p postage.

Sheffield Museum.

CONTRIBUTIONS FOR THE "NEWSLETTER" ARE ALWAYS WANTED anything you have to contribute would be welcome, preferably typed, but this is not necessary providing hand-writing is clear.

J.C.

COLEOPTERIST'S NEWSLETTER: Secretary & Editor = J.Cooter, 222 Whittern Way, Hereford, HR1 1QP
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A FURTHER NOTE ON DMHF - Howard Mendel informs me that the crazing (wrinkling) of the surface as the DMHF dries out can be removed by stroking the surface with a damp brush. He also points out that the material apparently disappears on exposure to ethyl acetate vapours, presumably soaking into the card or even subliming.

FIFTH SCOTTISH ENTOMOLOGICAL MEETING - The 1985 event will be held between June 14th and 16th using the Firlush Point Field Centre as the base. The Centre is situated on the western shore of Loch Tay (grid ref., NN(27)602337) and is within easy reach of such places as Loch Rannoch, the Black Wood of Rannoch, Rannoch Moor and Ben Lawers.

The Centre offers dormitory accommodation in the form of four berth chalets, has laboratory facilities (but bring your own microscope) meals, including packet lunch are provided and there is a licenced bar - cost £12 per day.

Full details can be had from Adam Garside, Assistant Keeper of Natural History, Museum & Art Gallery, Albert Square, Dundee, DD1 1DA. Booking should also be sent to this address.

LIST OF CHRYSOMELIDAE AND CURCULIONOIDEA FROM CLINTS QUARRY

WEST CUMBRIA. - Clints Quarry in West Cumbria is a disused limestone quarry and covers an area of 44 acres. It lies off the main A595 road between Bigrigg and Egremont and falls within National Grid square NY00,12. It has been an SSSI since 1969, and has recently been acquired by the Cumbria Trust for Nature Conservation who are to manage the whole area as a Nature Reserve. Since being abandoned in the late 1920's the quarry has been colonised by many limestone-loving plants, and a number of rare and local orchids are to be found in several places. The main habitats include, limestone

cliffs and boulders, herb rich grassland, scrub and mature woodland, pools and old spoil heaps with interesting herbage.

During the past two years I have made a survey of the Coleoptera of the quarry and paid particular attention to the Chrysomelids and weevils, and the following list is the result of a number of trips made between May, 1982 and September 1983.

Chrysomelidae:

<u>Cryptocephalus moraei</u> (L.)	<u>Galeruca tanacetii</u> (L.)
<u>Chrysolina brunsvicensis</u> (Grav.)	<u>Longitarsus suturalis</u> (Marsh.)
<u>C. hyperici</u> (Forst.)	<u>Crepidodera ferruginea</u> (Scop.)
<u>C. staphylaea</u> (L.)	<u>Chalcoides fulvicornis</u> (F.)
<u>Phaedon tumidulus</u> (Germ.)	<u>Chaetocnema concinna</u> (Marsh.)
<u>Hydrothassa glabra</u> (Hb.)	<u>Sphaeroderma testaceum</u> (F.)
<u>Phyllodecta vulgatissima</u> (L.)	<u>Apteropeda orbiculata</u> (Marsh.)
<u>Galerucella lineola</u> (F.)	<u>Lochmaea crategi</u> (Forst.)
	<u>Cassida rubiginosa</u> Müller

Apionidae:

<u>Apion apricans</u> Hb.	<u>A. seniculus</u>
<u>A. carduorum</u> Kirby	<u>A. tenue</u> Kirby
<u>A. curtirostre</u> Germ.	<u>A. ulicis</u> (Forst.)
<u>A. ervi</u> Kirby	<u>A. viciae</u> (Pk.)
<u>A. loti</u> Kirby	<u>A. violaceum</u> Kirby
<u>A. pisi</u> (F.)	

Curculionidae:

<u>Otiorhynchus porcatus</u> (Hb.)	<u>Tropiphorus terricola</u> (Newman)
<u>O. rugifrons</u> (Gyll.)	<u>Barynotus moerens</u> (F.)
<u>Trachyploeus bifoveolatus</u> (Beck)	<u>Sitona ambiguus</u> Gyll.
<u>Phyllobius calcaratus</u> (F.)	<u>S. humeralis</u> Sph.
<u>P. viridiaeris</u> (Laich.)	<u>S. lepidus</u> Gyll.
<u>P. viridicollis</u> (F.)	<u>S. lineellus</u> (Bonsd.)
<u>Barypeithes araneiformis</u> (Schrank)	<u>S. striatellus</u> Gyll.
<u>Sciaphilus asperatus</u> (Bonsd.)	<u>S. sulcifrons</u> (Thunb.)
	<u>S. suturalis</u> Sph.

<u>Hypera arator</u> (L.)	<u>Cidnorhinus quadrimaculatus</u> (L.)
<u>H.nigrirostris</u> (F.)	<u>Ceuthorhynchidius troglodytes</u> (F.)
<u>H.plantaginis</u> (Dg.)	<u>Ceutorhynchus pollinarius</u> (Forst.)
<u>H.postica</u> (Gyll.)	<u>C.quadridens</u> (Pz.)
<u>H.punctata</u> (F.)	<u>Rhinoncus pericarpus</u> (L.)
<u>H.suspiciosa</u> (Hb.)	<u>Phytobius quadrituberculatus</u> (F.)
<u>Cionus scrophulariae</u> (L.)	<u>Mecinus pyraister</u> (Hb.)
<u>Leiosoma deflexum</u> (Pz.)	<u>Anthonomus bituberculatus</u> Thon.
<u>Dorytomus taeniatus</u> (F.)	<u>A.pedicularius</u> (L.)
<u>Orthochaetes setiger</u> (Beck)	<u>Rhynchaenus salicis</u> (L.)
	<u>Ranphus pulicarius</u> (Hb.)

R.W.J.Read, 43 Holly Terrace, Hensinghan, Cumbria.

FRENCH PUBLICATION ON GENUS APION

Ehret, Jean Marie 1983-1984 Les Apions de la Region Bourgogne. (Soc. d'Histoire Naturelle et des Amis du Museum d'Autun, Annales Scientifiques).

1983 Part 1 pages 1-50 Bull., 105

1983 Part 2 pages 51-102 Bull., 106

1983 Part 3 pages 103-154 Bull., 107

1983 Part 4 pages 155-208 Bull., 108

1984 Part 5 pages 209-258 Bull., 109

This is a five part series dealing with 117 species of Apion from the Region Bourgogne (Burgandy) of France. Part 1 deals with morphology, biology, ecology and host plants. Parts 2-5 include a key to sub-genera and species, and for each species there is a short description together with a distribution map. Part 5 also includes a five page bibliography and 6 plates of photographs illustrating 72 different species. This work will be of interest to British Coleopterists as it deals with approximately 78 of the species which occur in this country, and the section listing all the individual host plants is particularly useful.

Each part of the series costs 15Fr

R.W.J.Read.

PROPOSED FIELD MEETING - Anyone interested in taking part in a collecting trip to the Norfolk coast or the Breck ? It is hoped that access can be obtained to Ministry of Defence land on the Breck, as well as visiting some of the other sites. Please contact Dr.A.Irwin, Department of Natural History, Castle Museum, Norwich, NR1 3JU (Likely time = Easter/late Spring 1985).

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PROPOSED FIELD MEETING - North Yorkshire, Autumn 1985.

Is anyone interested in taking part in a long weekend (say up to 4 days but with no necessity to stay the full length of time) field meeting in the North Yorkshire Moors next autumn ? A date will be sorted out later, but possibilities are September 12-16th (including Friday 13th!); 19-23rd or 26-29th. An informal dinner will be arranged for the Saturday evening. If interested contact: Roger Key, Invertebrate Sites Register, Nature Conservancy Council, Northminster House, Peterborough, PE1 1UA (tel., 0733-40345)

There are a number of field centres in the Whitby/Scarborough/Pickering area and I hope that residential accomodation can be arranged with at least some laboratory facilities at not too great a cost - a full announcement will be made in the next "Newsletter".

This part of Yorkshire has proved entomologically very fruitful in the past - there are some nice old woodlands, rich freshwater habitats and the coastline is particularly of note, really one is spoilt for choice. The Coleoptera of the area was well documented in the 1950's by G.B.Walsh in "The Natural History of Scarborough District" produced by the Scarborough Field Naturalist's Society.

Roger Key.

NATURE CONSERVANCY COUNCIL

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THE INVERTEBRATE SITE REGISTER

The Nature Conservancy Council is developing an Invertebrate Site Register, the object of which is to compile an inventory of sites of importance to the conservation of insects and other invertebrates covering all freshwater and terrestrial habitats in England, Scotland and Wales.

Its aim is to bring invertebrates into the "mainstream" of conservation so that sites of importance are recognised and measures to safeguard and maintain the invertebrate interest are given equal weight with other biological interests.

ORGANISATION

The register is organised by the Nature Conservancy Council, a body set up and funded by parliament to promote and advise on nature conservation. The N.C.C. works closely with many voluntary organisations, including the County Trusts for Nature Conservation.

The development of the Site Register is being directed by invertebrate specialists in the Chief Scientist's Team of N.C.C. which will be based at Peterborough as from mid-November 1984. Alan Stubbs and Ian McLean are particularly concerned with the terrestrial fauna and Margaret Palmer with freshwater invertebrates. They will be working closely with N.C.C.'s regional and other scientific staff, several of whom are entomologists. The day to day running of the Register is the responsibility of entomologists working on contract, also based in Peterborough.

After a period of four years we are approaching the half way stage in gaining the national picture. It has taken so long because the support from entomologists, arachnologists, conchologists etc. has been so good - this is very welcome since the task can therefore be done properly. We are still receiving additional information for areas and species groups already covered - please maintain this flow of information which enables us substantially to update and improve on the recognition and evaluation of good sites.

We are developing a close relationship with other recording and conservation projects on invertebrates. The Site Register is complementary to the recording schemes operating through the Biological Records Centre at Monks Wood and local museums, and also relates to the Insect Red Data Book (completion date December 1984).

WHY SUCH A SCHEME IS IMPORTANT TO YOU

It is readily apparent in most regions of Britain that the pressures for the destruction of habitat in the countryside are reaching a critical point. The decisions we make now for conservation have a high degree of finality and it is therefore absolutely essential that invertebrate information and the views of invertebrate biologists are made available to decision makers while options still remain. There is no such thing as a "safe" site since, even on reserves and protected areas, there is a need to influence conservation management decisions in favour of invertebrates.

The greatest danger of all arises through not knowing of the site in the first place

HOW TO CONTRIBUTE

We would like to hear of sites which you personally know to be of entomological value or of interest for other invertebrates. If you are a specialist you may know whether the fauna on a site has a local or national significance. If not a specialist but you feel that you know of sites with good potential, then we shall be glad of your views so that further assessment can be considered.

Essentially we are looking for:-

- a. sites with exceptional richness in terms of numbers of species
- b. sites with nationally or locally uncommon species or a particular concentration of localised species
- c. unusual combinations of habitat or unusual foodplants
- d. sites of geographical significance where notable species are particularly abundant or lie on the edge of their range etc.
- e. habitats of invertebrate value where you feel these are not recognised by the conservation movement

It would be helpful if you would supply information on the standard forms. These are designed to assist the contributor to include all the relevant information and to ease subsequent handling of the data on our part. A sketch map, however crude, is invaluable in pin-pointing the areas of importance within a site and the grid reference box should preferably include a six figure reference for the centre of the site.

A short list of important species will be useful or, if it is a site with a high diversity of a small group (e.g. butterflies or dragonflies) then a list of resident breeding species is obviously of value. Please note that it is not essential to include full species lists since we recognise that to compile such lists is time consuming and is more properly the function of the B.R.C. schemes. If you can supply such lists easily, however, then fair enough please do, but it is then important to indicate which species you regard as significant. It would also be helpful to know if you have already sent species data for the site to the B.R.C. so that we do not ask you to duplicate effort.

We would much prefer an early response with brief details than await the rainy day when you might find time to include fuller information. The first essential is to know of the site and of your knowledge of the site.

As a related issue, we would be interested to hear news of species declines, habitat loss or mismanagement of sites - factual information which helps to quantify the problems faced by invertebrate conservation. (Please, however, don't send in long screeds on general or theoretical conservation issues, we have little enough time to work on the register!)

Lastly, may we also ask that you write in **black** biro or pen as red, blue and pencil do not usually photocopy well.

CONFIDENTIALITY

Unless you request otherwise, using the "confidentiality" boxes on the I.S.R. form, we shall assume that your information can be made available to County Wildlife Trusts and other responsible conservation organisations where appropriate, as well as to the Biological Records Centre. This will help to ensure that the conservation bodies do take your information seriously. We must emphasize, however, that we fully accept that certain types of information should be kept confidential and that your own specified requirements will be respected.

Alan Stubbs
Chief Scientist's Team
Nature Conservancy Council

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Tel: 0733 40345
November 1984

THE INVERTEBRATE SITE REGISTER - A PLEA FOR INFORMATION
FROM COLEOPTERISTS

All entomologists must be aware of the alarming rate of decline of many species of insects and the appalling loss of habitat that seems ever to be accelerating. You only have to look at back numbers of this newsletter to find articles observing the increasing rareness or complete disappearance of various beetle species. Jonathon Cooter's article in issue number 5 (Aug '81) really summed up what insect collecting is getting to be like in parts of this country - "*On returning (from France) a great sadness befell - the umbrells supported only a few drab flies, sweeping produced nothing more alarming than tennis elbow and searching dead timber produced only the usual species*" "...surely I am not imagining this lack of insects - have you noticed it too?" ...have you?

Most of you will have, by now, heard of and, hopefully, may have contributed to the Nature Conservancy Council's **Invertebrate Site Register (ISR)** run by Alan Stubbs and Ian McLean. For those of you who have not, enclosed with this newsletter is an overview of the ISR together with a sample ISR form to stimulate you into activity - more can be sent on demand.

The aim is to get insects (and other invertebrates too) the recognition they deserve in national conservation by letting the N.C.C. people on the ground - the Assistant Regional Officers (AROs) know what are the best invert. sites in their areas, why they are important and what must be done to keep them so. We do this by way of county reports of all the sites that we can find out about in a particular ARO's "patch" and include information on all, not just the very best sites (n.b. these reports cannot, I'm afraid, be made generally available to contributors - they often contain information given in confidence, but we will in future try to keep contributors posted on the state of the ISR by an occasional newsletter).

Quite a number of counties have already been covered - most of Southern and Western England, Wales and Scotland and masses more information is building up on these areas ready for the ISR update of them as time and resources become available - so please continue to contribute wherever you study. Current concentration is on the **North of England** and **Cheshire**, for which I have been taken on for three years.

With only a few staff and very limited resources, we rely on voluntary contributions of information from amateur and professional entomologists alike to tell us of their invertebrate hunting grounds. Can you help? We are, after all, in the business of keeping those hunting grounds for present and future entomologists.

I hope that you can. If you have not contributed before, **PLEASE** do so now - your own particular information may not be very great but will add up with the contributions from other entomologists to identify important areas. If you already have contributed no doubt you will have discovered other information or new sites since you were last in touch - we can always supply more ISR forms.

For a number of really rare species (the Insect Red Data Book has a large section on Coleoptera and should be out very soon) or habitats, the end may well be nigh (remember the large blue butterfly) the more information that we have, the better case can be put for the conservation of invertebrate sites.

Please get in touch.

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NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME

GRID REFERENCE

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DATE OR PERIOD OF VISITS

MODERN COUNTY

RECORDER

ALTITUDE M.

Site Status

- National Nat. Res.
- RSPB Reserve
- County Trust Res.
- SSSI
- Local Authority
- Common Land
- Forestry Commission
- Min. of Defence
- National Trust
- Private Owner
- Other, please state

Confidentiality

- At discretion of NCC
- Consult recorder

Sketch Map (showing main areas of invertebrate interest)

Site Description (habitats of interest)

Main Invertebrate Interest

General Comments (Site importance, conservation problems etc)

(Please use back of sheet for further details - eg species lists, literature ref. etc)

Office use