THE CONCHOLOGISTS' NEWSLETTER

No. 15 Compiled by: P. E. Negus, [redacted]

December 1965 London, S.W.1.

Produced by 'The Conchological Society of Great Britain and Ireland'

THE 10 KILOMETRE SQUARE MAPPING SCHEME FOR BRITISH NON-MARINE MOLLUSCA

Response from members is still not as good as might be hoped. Over the past three years information has been received from about 50 people, of whom 33 are members of the Society. A further 13 members have promised help. To all these my best thanks are due. The task of collecting records from each of the 3,500 or so 10 kilometre squares in the British Isles, so as to make possible the eventual production of detailed distribution maps, is clearly formidable, but certainly within our capabilities within, say, the next five years. In case some members should be holding back through lack of confidence in their ability to identify Mollusca, it should be emphasized that records of the very commonest and most distinctive species, such as Helix aspersa or Lymnaea peregra, are needed quite as much as those of the rarer; even short lists of a few names would be most welcome. An excellent handbook of the British species has recently been published (Janus, 'The Young Specialist looks at Molluscs', Burke & Co., price 7/6 in paper covers). Furthermore, I am always glad to identify specimens if sent to me at the address given below, adequately localized, and packed in a manner that will ensure their safe delivery (see Conchologists' Newsletter No. 11 (1964), p. 68). If you think that you can help in any way, even with a list of snails from a single wood or pond, please let me know. Those areas for which records are particularly scanty are shown in the map recently published in the Journal (25:307).

Notes on recording.

In order to facilitate recording, the Society has had printed a 6" x 4" record card, available free to members, which carries in abbreviated form the complete list of known British species (see illustration). In nearly all cases the names are those given in the most recently published Census (J. Conch. 22 (1951): 171) and follow the same taxonomic order. Five aggregate species are also included for convenience during field work (Carychium minimum agg., Cochlicopa lubrica agg., Arion ater agg., Vitrea crystallina agg., Agriolimax agrestis agg.), but obviously it is desirable that the actual specimens found should afterwards be examined critically and assigned to their correct segregates and the card altered accordingly. To mark a species as present, cross firmly through the latin name in pencil leaving the number untouched (see illustration).

The cards can be used in one of two ways. First, if an area is being fairly thoroughly worked, a card can be compiled giving all the species found by a recorder within the limits of a particular 10 kilometre square during current field work or in any year back to 1950. Such a composite card should carry only the 10 km. square grid reference (4 figures, e.g. 5 2 6 - - 8 - -) but no habitat or altitude indication. As a check on the grid reference, give the approximate area (e.g., in this case, 'Square east of Littleport'). Give the year, or inclusive years, of collecting (e.g. '1962-65'), and the name of the vice-county.

Secondly, if considered worth-while for permanent record, separate cards can be used in localities of different habitat type within the square; the cards can be given a more detailed grid reference (e.g. 5 2 6 5 - 8 5 - , or 5 2 6 5 2 8 5 7), locality, date, and in addition information on habitat and altitude. Brief data on plant associates would be particularly useful.

It may be found helpful to retain duplicates of certain cards sent in so that only increments to the lists need later be forwarded.

GRID ref. 52/65-85-

LOCALITY *by Shippea Hill Station.*

DATE *6.1964*

V.C. *Cambridge*

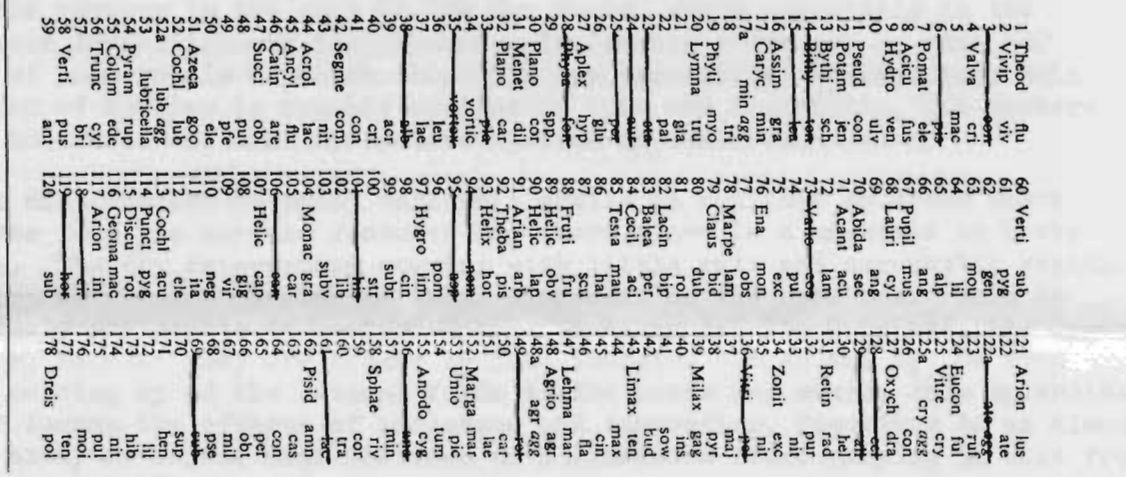
HABITAT

fen drains and adjoining grassy banks

ALT. *c 10 ft.*

RECORDER

M.P.K.



One of the objects of the mapping scheme is to try and discover to what extent certain species have been humanly introduced or dispersed in different parts of Britain. It would therefore be of great value if recorders would mark on their cards those species which in their opinion show signs of having been accidentally introduced by man in a particular area, prefixing them with a 'G' (for 'garden'). Introduction may be suspected if the species in question seems only to occur in association with human settlements, recent or abandoned, rubbish tips, etc.

The National Grid.

The National Grid is shown on all modern (post-1945) Ordnance maps, which also carry an explanation of its working. The most important point to remember is that the easterly components of the reference (eastings) must always be given before the northerly components (northings) (remember that 'E' comes alphabetically before 'N'). Four figures suffice to define any 10 kilometre square in Britain, e.g. Shippea Hill station (Cambridgeshire) lies about the middle of square 52/68. The first two figures refer to the 100 kilometre square, the second two to the 10 kilometre square within it (it should be noted that on the more recent maps the first pair of figures is also given as letters (in this particular case TL), but it is asked that figures only be used on the cards). A locality can be defined within a 1 kilometre square by using six figures (e.g. 52/6585), or even within a square of 100 metres by using eight figures (e.g. 52/652857).

Very convenient maps on a scale of five miles to the inch showing the grid of 10 kilometre squares are contained in the Automobile Association's 'Roadbook of England and Wales' and 'Roadbook of Scotland', obtainable post-free at 25/- and 17/6 respectively from the headquarters of the Association at Fanum House, Leicester Square, London, W.C.2.

The National Grid unfortunately does not cover Ireland. However, the Botanical Society in connexion with their own mapping scheme have projected the grid westwards to cover that country, and sets of half-inch maps have been prepared on which the lines of the grid have been laid down in manuscript and a numbering agreed upon. One such set is in the possession of the Conchological Society's Recorder. Fresh field-work in Ireland is badly needed. Anyone proposing to collect there should write to me, enclosing their own maps (inch or half-inch) of that part which they are visiting, and I can then mark on the grid for their use in the field

(Please see next page (98) for Recorder's address) M. P. Kerney

Although operculate land snails play a very minor role in the British fauna, the reverse is the case in the New World, where especially in the Larger West Indian islands they abound. In Jamaica there may be some 450 species of land snails of which about 55% are terrestrial operculates; this proportion of species is roughly similar in Cuba and Hispaniola, but nowhere else in the world are land operculate species so numerous.

The distribution of these calciphil snails is confined to areas where limestones form the surface features and where there is a moderate to heavy rainfall. The dry intervening country with little rain and xerophytic vegetation forms as great a barrier to their dispersal as the open sea. This is particularly noticeable in Western Cuba. In Piner del Rio Province, the Organ Mountains, because they are broken up into isolated blocks and by the even greater cutting up of the lateral folds to the north and south, show splendidly in their faunas the effects of isolation and inbreeding, resulting in an almost endless array of races, each confined to a limestone cliff varying in size from a few yards to miles in extent.

On the mainland similar conditions were met with by the writer in British Guiana and Venezuela, where small isolated limestone hills would produce a surprising variety of mollusca, mostly operculates, while the intervening areas of grassland were entirely barren in this respect.

By far the greater number of American land operculates were included in the family Cyclostomidae, which contained both Old and New World forms. The American species have since been removed into a separate family the Annulariidae, founded upon a constant and essential difference in the radula.

This family, the Annulariidae, has further been divided into sub-families, genera and sub-genera, which are based mainly upon modifications of the opercular characters; the presence or absence of punctures or slits within or on the edge of the aperture and, where present, the nature of various devices for enabling the animal to obtain air when the aperture is sealed by the operculum.

The breathing devices found in the Annulariidae are very ingenious. They range from a mere notch in the peripheral callus near the posterior angle of the aperture leaving a slender opening when the operculum is withdrawn, to a puncture in the parietal wall, which may or may not be provided with a projecting tube (siphon) on the outside. Some have a puncture in the parietal wall connected with the outer surface of the peristome by a slit. In some the puncture communicates directly with the hollow axis of the shell. Where the umbilicus is sealed by the parietal callus, the animal breathes through the perforation in the plug at the truncated apex. Apex breathing when the operculum is closed reaches its highest development in Rhythidopoma, in which the siphon bends down through the solute portion of the last turn, over the base of the preceding turn into the umbilicus which is completely plugged and breathing is effected through the axial puncture at the truncated apex.

The operculum which also shows a wide range of variation consists of a basal chondroid plate upon which are calcareous ribs and lamellae, the modifications of which have been used in sub-dividing the family into a series of sub-families and genera.

The shell in the Annulariidae varies in shape from depressed helicoid to elongate conic and is often strongly sculptured and brightly coloured. The vast majority of species are of small size, ranging from 10mm. to 40mm. in length. The genus Annularia includes the very curious sub-genus Blaesospira from Cuba, in which the shell consists of an openly coiled tube with two rows of strongly elevated, thin, hollow spines between the apex and the umbilicus.

The geographical range of the Annulariidae extends from the Bahamas and Lower Florida on the north, throughout the Greater and Lesser Antilles, and on the mainland from Mexico to Bolivia. By far the greatest development is centred in the Greater Antilles.

The remaining New World operculates belong to the family Cyclophoridae, which is even more strongly represented in the Oriental Region. Its distribution in the Americas is similar to that of the Annulariidae, from Mexico over South America and throughout the West Indian islands. The American Cyclophoridae are divided into a number of sub-families of which the most important are the Megalomastominae and Aperostominae.

The former are elongate-conic or elongate turreted shells, with a horny operculum. In Cuba this sub-family is represented by the genus Farcimen, where it is widely distributed. The shells vary in shape from ovate to elongate-conic. All members of the genus Farcimen are mulch-dwellers; they find their optimum habitat where dead leaves and vegetable detritus becomes mixed with sand or soil at the base of stone walls or dead trees. Here there is usually sufficient moisture to furnish suitable conditions for the development of fungi upon whose mycelial threads they seem largely to subsist. It is only during rain that they may occasionally be seen climbing a few feet above the level they usually occupy.

This type of habitat does not consequently restrict them in the way that the calciphilous Annulariidae are restricted and the various species are often found over a considerable area. They are equally at home in both the mountains and the plains.

On the mainland the curious genus Tomocyclus occurs in Guatemala. The shells have a circular aperture and an elongated, turreted spire, the apex is always decollate, but the shell may still consist of as many as 8 whorls. These snails frequent rocks and stone walls, where they can sometimes be found above ground after or during rain. The beautiful Tomocyclus gealei Crosse & Fischer, with a shell some 40 mm. in length, was observed crawling beneath a ledge some 4 feet above the ground near Puerto Barrios in 1938.

In the sub-family Aperostominae the shells are of helicoid or depressed helicoid shape, the genus Aperostoma containing some of the largest land operculates known. Aperostoma giganteum (Reeve) attains a maximum diameter of some 60 mm. The distribution of the genus Aperostoma extends from Mexico to Brazil and throughout the West Indies. Like Farcimen, Aperostoma lives amongst dead leaves and the roots of plants and the majority of species are found on the South American mainland.

Somewhat smaller species, belonging to such genera as Ptychocochlis and Poteria occur commonly in Jamaica, inhabiting the tree-clad limestone hills. In spite of their common occurrence a visit to even a well established locality during dry weather would certainly prove fruitless and even a dead shell would be hard to find. During or shortly after rain, however, the snails will be very much in evidence and many hundreds can usually be observed in a few square yards. There is perhaps nowhere in the world where so many different species of land mollusca can be collected in a small area as is possible on the limestone hills of Cuba and Jamaica, and, in the latter island, the writer has personally collected in a few hours some 140 different species, 70% of them land operculates, in less than a square mile in Corn Puss Gap in the mountains of the John Crow range. However, it is unlikely that a field meeting to this promising locality will be possible!

T. Pain

FIELD MEETING TO EXAMINE THE GAULT CLAY OF FOLKESTONE

28th. MARCH 1965

DIRECTOR: D. G. PICKRELL

The Gault Clay of Folkestone consists of about 200 ft. of grey sandy marine clay which was deposited about 120 million years ago in Albian times in a shallow sea, opening into an ocean to the north and covering an area

between Lincolnshire and South Devon (and possibly further north).

The most interesting and varied group of animals which inhabited this sea was the ammonites, a group of extinct Cephalopods possessing a many-chambered coiled shell not unlike the modern Nautilus. These shells have been preserved by calcite replacement or as casts of iron pyrites or calcium phosphate.

During the time the clays were being laid down the ammonites evolved and, in doing so, altered their shell morphology which has made it possible to divide the clay into a number of zones by the particular assemblage of ammonites within them.

Ammonite zones and subzones of the Gault modified from Spath (1943)

Stage	Zone	Subzone
UPPER ALBIAN (UPPER GAULT)	Mortoniceras inflatum	Callihoplites auritus
		Hysteroceras varicosum
		Hysteroceras orbignyi
MIDDLE ALBIAN (LOWER GAULT)	Euhoplites lautus	Dipoloceras cristatum
		Anahoplites daviesi
		Euhoplites lautus and E. nitidus
	Hoplites dentatus	Mojsisovicsia subdelaruei
		Dimorphoplites niobe
		Anahoplites intermedius
		Hoplites dentatus and H. spathi
		Hoplites (Isohoplites) eodentatus
LOWER ALBIAN (LOWER GREENSAND)	Douvilleiceras mammillatum	Douvilleiceras mouile

A party of about 10 members and friends, after a morning of not very profitable marine mollusca collecting in East Wear Bay, had lunch and then started to collect from the slumped clay and foreshore working their way towards Copt Point.

The weather was somewhat cool and the clay was not in the best condition for collecting, being rather too wet and sticky, however some interesting finds were made. These were:-

Part of the ammonite Douvilleiceras mammillatum (Schloth) from the junction bed between the Gault and the underlying Lower Greensand, although the specimen found was not in situ the zone was pointed out to members.

In the Lower Greensand were noted the shells of the large fossil oyster Exogyra latissima (Lamarck) - none were collected due to the hardness of the surrounding sandstone.

Other interesting finds were two ammonites of the genus Dipoloceras, one being Dipoloceras cristatum (Deluc) collected by the director from the cristatum zone and the other Dipoloceras pseudaeon Spath collected by Dr. Llewellyn Jones.

Several solitary corals and crinoid columnals were found indicating the shallowness of the Albian sea. Some vertebrae and teeth of fish were found, also many bivalves and a few gastropods and in the Dentatus zone a large piece of fossil wood with Serpula sp. upon it.

The party returned to Folkestone by walking back to East Cliff where tea was obtained.

List of other fossils found:

Zone ammonites:- Hoplites dentatus (J. Sowerby), Euhoplites lautus (J.S.), Hysteroceras orbignyi, H. varicosum (J. de C. Sowerby),

Other Cephalopods:- Anahoplites planus (Mantell), Beudanticeras beudanti (Brongniart), Dimorphoplites biplicatus (Mantell), Hamites maximus J.S., H. intermedius J.S.,

	Neohibolites minimus (Miller), Mortoniceras sp., Euhoplites sp.,
Bivalvia:-	Exogyra latissima (Lamarck), Inoceramus concentricus Parkinson, I. sulcatus P., Nucula pectinata J.S.,
Gastropoda:-	Anchura carinata (Mantell), Gyrodes genti (J.S.), Nummocalcar fittoni (Roemer), Eutrochus sp.,
Scaphopoda:-	Dentalium decussatum J.S.,
Anthozoa:-	Trochocyathus harveyanus Edwards and Haime,
Pisces:-	Lamna appendiculata Agassiz,
Echinoderma:-	Isocrinus sp., Hemiaster sp.

FIELD MEETING TO EXAMINE THE MOLLUSCA OF THE RIVER CRAY

13th. JUNE 1965

DIRECTOR: D. G. PICKRELL

The object of the field meeting was to examine the fauna of the River Cray and to obtain Anodonta cygnaea (L.) and Anodonta cygnaea var. zellensis Gmelin*.

About seven members and friends with a film camera met at Bexley Station. The main party then proceeded on foot to the River Cray near Woollett Hall Farm working their way up river to North Cray finding Lymnaea peregra (Müller), Lymnaea stagnalis (L.) and Planorbarius corneus (L.). In the undergrowth on the banks of the river were found Vallonia excentrica Sterki, Hygromia hispida (L.), Retinella nitidula (Draparnaud), Agriolimax agrestis agg. and Arion ater agg.

At North Cray Bridge the main party was met by the film unit who filmed the activities of members on the southern side of the bridge. From this locality were obtained Lymnaea palustris (Müller), Planorbis planorbis (L.), Sphaerium lacustre (Müller), and Pisidium milium Held, as well as Lymnaea peregra (Müller), L. stagnalis (L.) and Planorbarius corneus (L.).

The party then made their way to Ruxley Gravel Pits (near the Sidcup bypass). In the first lake the owners were dredging out the weed. Members were thus able to collect from the dredged material many Anodonta cygnaea var. zellensis Gmelin and a few A. cygnaea (L.)

In the second lake many Sphaerium corneum (L.) were noted.

Lunch was taken on some waste ground near the first pond. On this ground were found Monacha cantiana (Montagu), Helicella virgata (da Costa), Helicella caperata (Montagu), and Agriolimax reticulatus agg.

The party then moved to some marshy ground beyond the main lakes from which were obtained Planorbis vortex (L.), Physa fontinalis (L.), Planorbis albus Müller, and Sphaerium corneum (L.). In the surrounding vegetation were found Cochlicopa lubrica (Müller), and Succinea pfeifferi Rossmässler.

Thanks are due to Mr. Frank J. Holroyde of Kent Naturalists' Trust for permission to visit Ruxley Gravel Pits.

*ELLIS A. E. 1962 British Freshwater Bivalve Molluscs. Linn. Soc. Lond. Pages 19 & 21.

FIELD MEETING - 19th. JUNE 1965

Five members and three visitors met at Droylsden station on Saturday 19th. June, and proceeded to the branch of the Ashton Canal near the station. Only a short length of this disused branch remains, and it is very much choked with vegetation. Mollusca were fairly plentiful, and the following species were taken:

Viviparus contectus Millet	Bithynia tentaculata (L.)
Lymnaea stagnalis (L.)	L. peregra (Müller)

Physa fontinalis (L.)
Planorbis carinatus Müller
P. albus Müller
Acroloxus lacustris (L.)
S. lacustre (Müller)
Planorbarius corneus (L.)
P. vortex (L.)
Segmentina complanata (L.)
Sphaerium corneum (L.)
Pisidium sp. (To be determined by Mr. Stelfox)

A pond near the canal produced only:

Lymnaea stagnalis (L.) juvenile
Sphaerium lacustre (Müller)

The following were found on a patch of waste ground near the station:

Arion circumscriptus Johnson
Agriolimax agrestis agg.

The party then went by car to Fairfield, and investigated the main Ashton Canal above Fairfield Locks, where the following species were found:

Bithynia tentaculata (L.)
L. peregra (Müller)
Planorbarius corneus (L.)
P. vortex (L.)
Sphaerium corneum (L.)
Lymnaea stagnalis (L.)
Physa fontinalis (L.)
Planorbis planorbis (L.)
P. albus Müller
Pisidium sp. (To be determined by Mr. Stelfox)

Marjorie Fogan

FIELD MEETING TO THE RIVER MEDEN, THORESBY PARK, NOTTS.

26th. JUNE 1965

Fifteen members and friends met under the leadership of Mr. G. W. Pitchford, but we were disappointed not to have seen any members from Yorks. or the North West. The purpose of the meeting was to investigate the conditions in the river which produce bivalves of great size, Unio pictorum in particular, which occurs here larger than anywhere else in the world. (See Pitchford, J. Conch., 23, 338 and 401). The river is a small one, not more than 2' 0" deep in most places, and representative collections of the rich bivalve and gastropod fauna were easily obtained, the largest U. pictorum found measuring 146 mm. in length. It seems likely that the exceptional size of these animals results from a rich algal fauna bred in the ornamental lakes from which the river flows, but Mr. Pitchford reports that these lakes are known to be rapidly silting up as a result of nearby colliery workings, and if this goes on much longer the locality will probably cease to be unusual. It is a continuous source of regret to the Natural historian to note how interesting localities, unless specially and artificially preserved, rapidly become eliminated by neglect or deliberate interference.

FIELD MEETING - 3rd. JULY 1965

Five members and two visitors met at Atherton on Saturday July 3rd., and went by car to Radcliffe. The Bolton and Bury Canal has been disused for many years and only two sections of it now remain, one of which lies between Bolton and Radcliffe and is blocked off forming a dead end at Radcliffe. Starting from the dead end the party moved along the towpath in the direction of Bolton. The canal is dirty and a good deal overgrown, but mollusca were plentiful and the following species were obtained:

Valvata cristata Müller	Bithynia tentaculata (L.)
Lymnaea stagnalis (L.)	L. peregra (Müller)
Physa fontinalis (L.)	Planorbarius corneus (L.)
Planorbis carinatus Müller	P. vortex (L.)

P. albus Müller — Sphaerium corneum (L.)

S. lacustre (Müller) — Anodonta cygnea (L.)

A. anatina (L.) dead shells only

Marjorie Fogan

REPORT OF FIELD MEETING HELD AUGUST 21st. AT GORTON NEAR MANCHESTER

A small group of three members and one visitor met on the afternoon of August 21st. to further their study of molluscan fauna of the canals around Manchester. It had been their intention to visit the Reddish branch of the Manchester-Ashton canal, but as most of this was recently filled in, only the northern portion in the districts of Gorton and Openshaw was available for examination. The filled-in portion was found to extend as far as the aqueduct over the railway close to the Gorton and Openshaw Station and it was at this point that the party commenced their search, working northwards towards the junction with the Manchester-Ashton canal.

The following aquatic spp. were taken:-

Bithynia tentaculata (L.) — Physa fontinalis (L.)

Lymnaea stagnalis (L.) — L. peregra (Müller)

Planorbarius corneus (L.) — Planorbis planorbis (L.)

P. vortex (L.) — P. contortus (L.)

Sphaerium corneum (L.) — S. lacustre (Müller)

All the above spp. were fairly frequent in the whole length of the canal examined but no land spp. were taken on the canal banks or the towpath. Like most others in this area, the canal has not been used for very many years, and the water is very shallow, in many places being overgrown with Glyceria maxima (Hartm.) Holmb., but in the water many interesting plants were noticed, among them being Lemna gibba L., Sagittaria sagittifolia L., Luronium natans (L.) Rafn., Alisma plantago-aquatica L., Potamogeton natans L., P. alpinus Balb., P. crispus L., and Ceratophyllum demersum L.

It is perhaps the great amount of this vegetation and diversity of leaf shape which provides suitable habitats for the variety of aquatic spp. found in these canals.

W. F. Edwards

A CONCHOLOGISTS' SHORE DIRECTORY

The marine Recorder is frequently asked by Members for details of good collecting localities in various parts of the country. At present such information is difficult if not impossible to provide. Many Members, however, have considerable experience of good collecting localities either near their homes or visited at holiday times. If this information could be pooled, and a county by county card index kept by the marine Recorder, the benefits to shell-collecting Members will be obvious. It is hoped that all Members who are able to make a contribution to such a directory will do so, as its usefulness will depend entirely on its comprehensiveness. The information on each locality will be classified as follows, and it will be a great help to the Recorder if Members providing the information will follow the same scheme:-

1. Name of locality. County and nearest town.

2. Nature of locality, e.g. rock pools, estuary, sandy bay, etc.

3. Name and distance of nearest railway station.

4. Details of transport available from nearest station, if any.

5. Special features of interest. Some information should be given of what the collector may expect as some are only interested in live-collected specimens, others in shell sand, etc. Details of any species of limited distribution which may be locally common may also be given.

6. Limitations, e.g. "no transport on Sundays", "low spring tides only", "permission required in advance from.....".

In view of the general co-operation anticipated in this venture, I trust Members will understand if instead of acknowledging each contribution individually I take this opportunity to thank everyone in advance who will help the Recorder in establishing this new service to all Members.

David Heppell
Marine Recorder

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Notice is given of the possible use by the International Commission of its plenary powers in connection with the following cases, details of which will be found in Bull. Zool. Nomencl. vol. 22, part 3.

(1) Validation of the generic name Amblema Rafinesque, 1820 (Bivalvia), reference number Z.N.(S.) 1699.

(2) Suppression of the specific names Voluta pertusa Linnaeus, 1758, V. morio Linnaeus, 1767, V. ruffina Linnaeus, 1767, and Bulla conoidea Linnaeus, 1767 (Gastropoda). Z.N.(S.) 1700.

(3) Suppression of the generic name Trichogonia Rossmässler, 1835 (Bivalvia). Z.N.(S.) 1702.

Comments on any of the above, in duplicate and bearing the reference number, should reach the Secretary of the International Commission on Zoological Nomenclature, c/o. the British Museum (Natural History), Cromwell Road, London, S.W.7, before 13th. February 1966.

FOR SALE

Books on British Molluscs:- Charles Thorpe, British Marine Conchology (1844) col. pls. 30/-. J. E. Gray, Turton's Manual of the Land and Fresh-water shells of the British Islands (1857) col. pls. 35/- F. M. Duncan, British Shells (1943) col. pls. 4/-. R. Rimmer, Shells of the British Isles, Land and Fresh-water (1907) 5/-. W. Clark, A history of the British Marine Testaceous Mollusca (1855) 17/6d. T. Brown, Illustrations of the Land and Fresh Water Conchology of Great Britain and Ireland (1845) col. pls. 35/-. C. Kingsley, Glaucus (1899 ed.) col. pls. 7/6d.
Books on Foreign Molluscs:- D. Dupuy, Histoire naturelle des mollusques terrestres et d'eau douce qui vivent en France (1847-52). Author's presentation copy to W. Kobelt. £5.10. Od. A. Locard, Catalogue General des Mollusques vivants de France (non-marine) (1882) no illustrations £1. A. Schmidt, Die kritischen Gruppen der Europäischen Clausilien (1857) 12 excellent pls. 30/-. H. C. Küster, Die Gattungen Pupa, Megaspira, Balea und Tornatellina. From 2nd ed. Martini & Chemnitz Systematisches Conchylien-Cabinet. Band I, Abteilung 15 (1852). In 2 parts, col. pls. £3.15. Od. Torre, Bartsch & Morrison, The Cyclophorid Operculate land mollusks of America (1942) 7/6d. T. Brown, The Elements of Conchology (1816) 17/6d. Mary Roberts, The conchologist's companion (1834) 9/-. Write to:- Mr. S. P. Dance, British Museum (Natural History), Cromwell Road, S.W.7.

NOTE

Messrs. E. W. Classey Ltd. (353 Hanworth Road, Hampton, Middlesex), well known as dealers in entomological works, have recently extended their range to include other branches of natural history, including conchology.

CHRISTMAS 1965

The compiler sends the Season's Greetings and Good Wishes to every reader.