	THE CONCHOLOGISTS, NEWSLETTER
No. 13	Compiled by: P. E. Negus,
June 1965	London, S.W.1.
Produced by 'The C	onchological Society of Great Britain and Ireland'
	JUNIOR MEMBERSHIP
The following the dates given:-	were elected to the Junior Membership of the Society on
	20th. February 1965
SALES Michael Paul	Spalding, Lincolnshire.
	13th. March 1965
SKENE Alastair	Orkney.
	10th. April 1965
WILLING Martin J.	Ewell, Surrey.
	15th. May 1965
NUGENT Nicholas G.	0. Kent.

TRANSPORTING LIVING MARINE MOLLUSCA

In Newsletter No. 11 Mr. A. E. Ellis gives some valuable advice on the posting of live molluscs. All that he writes from experience of packing and posting non-marine species is applicable to marine ones: e.g. over-crowding should be avoided, there is no need to supply food, nor to leave air holes BUT packing in seaweed as he suggests is not advisable. Most if not all marine algae decay quickly, especially in warm conditions, and even if the living animals are not asphyxiated their chances of arrival in good condition will be greatly lessened. Most kinds can be placed in polythene bags, tested first to check they do not seep (the heavier gauges are usually more reliable) with no more than a moistening of sea-water, the bag or bags then being packed in a leak proof tin; the bags are best fastened with elastic bands, twisted tightly. Limpets, which are difficult to keep in well-aerated aquaria, will survive with this treatment for up to two weeks. Small delicate-shelled species or sea-slugs that are liable to be crushed can be placed in polythene or glass tubes half-filled with sea-water and suitably packed to lessen likelihood of breakage; if each tube is placed in an outer polythene bag, specimens and glass will not be scattered should an accident occur. Freshly oxygenated sea-water should always be used rather than stale or stagnant water, and as much air space as possible be left in the bags or tubes.

Stella M. Turk

TAXONOMY OF PHYSA

Dr. Joshua L. Baily, Jr. (Canada California California

only on the columellar lobe, and this lobe alone was reflexed over the shell. So far as the American Physae which I have examined are concerned, he was right. But he also stated that the European <u>Physa fontinalis</u>, which I have not examined, had digitations on both lobes, and that both lobes were reflexed over the shell. But Mr. William J. Clench, of Harvard University, who has also examined both European and American Physae, tells me that the European Physae also have only one lobe reflexed over the shell and that it alone has digitations, and that Dr. Baker's conflicting conclusions were due to faulty observations. So the first question I would like to ask you is, does the left lobe of the mantle in <u>Physa fontinalis</u> have digitations as well as the right lobe?"

Another question asked by Dr. Baily: "Some time ago, Dr. Charles P. Winsor, also at Harvard, called my attention to the fact that the eggs of the American Physae have a double vitelline membrane, unlike that of Lymnaea, in which the vitelline membrane is single. But Mandahl-Barth, in his work on the freshwater Mollusca of Denmark, shows an illustration of the egg of a Physa in which there is only one vitelline membrane....So my second question is, is the vitelline membrane of <u>Physa fontinalis</u> single as in <u>Lymnaea</u>, or double as in the American Physae?"

With regard to the first query, Jeffreys, Reeve and Moquin-Tandon all figure <u>Physa fontinalis</u> with mantle digitations on both sides, whereas Taylor's figure shows digitations only on the right side, although in the text he states that they are especially developed on the left side. Anyone who can answer either or both of Dr. Baily's questions from personal observations is asked to communicate with him.

(from A. E. Ellis)

NOTES ON ARGOBUCCINUM (EUGYRINA) GEMMIFERA (EUTHYME)

This species is well known in South Africa, with an extensive distribution from False Bay to Delagoa Bay.

Owing to this lengthy range, examples of <u>gemmifera</u> are found which vary in build from heavy shells with large nodules, to lighter ones with smaller and more numerous nodules. Both types may be taken at the same place, e.g. Jeffreys Bay.

It is therefore not surprising to find when studying the literature, that this shell has had other generic and specific names applied to it in past years.

The shell is brown in colour, and has varices with darker marks at approximately every half whorl. There are 8 to 10 dark brown marks on the outer lip and the aperture is white inside.

Nodules on the body whorl vary in number from 12/14 on the heavier examples, to 20/22 on the shells of lighter build.

The latter were placed as <u>Var. lepta</u> by Paul Bartsch, but with a number of shells it was found they all graded together.

The periostracum is yellowish green, moderately thick and close, and of a velvety consistence.

A large number of specimens are held in the East London Museum collection, which have been taken at many different localities on the Ciskei and Transkei coasts, the largest measuring $100 \times 60 \text{ mm}$, and live specimens have been taken at Bonza Bay, Queensberry Bay, Haga Haga and Kei Mouth.

These localities are placed on record in addition to the places recorded by the South African Museum, i.e. False Bay, Natal coast and Delagoa Bay.

The habitat of gemmifera appears to be well below low tide mark, and live shells are found on reefs between tide marks only after very rough weather.

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SYNONYMY

Ranella leucostoma, Lamarck, Var.

Eugyrina gemmifera, Euthyme.)U.S. National MuseuEugyrina gemmifera lepta, Bartsch.)P. Bartsch, 1915Eugyrina gemmifera, Euthyme, 1889)Marine Shells of PcEugyrina gemmifera poecilostoma, Martens, 1904)W. H. Turton, 1932Eugyrina gemmifera lepta, Bartsch, 1915)

Marine Shells of South Africa, G. B. Sowerby, 1892 U.S. National Museum, Bull.91 P. Bartsch, 1915 Marine Shells of Port Alfred. W. H. Turton, 1932

ACKNOWLEDGMENTS

The writer expresses his thanks to the Chairman and Board of Trustees of the East London Museum, for permission to undertake this work and to the Director, Miss M. Courtenay-Latimer, for her encouragement.

REFERENCES

Barnard, K. H., 1963, Ann. S. African Museum, 47, Contributions Gastropoda.

Bartsch, Paul, 1915, U.S. Nat. Museum Bull. 91, South African Shells. Sowerby, G. B., 1892, Marine Shells of South Africa, London. Turton, W. H., 1932, Marine Shells of Port Alfred, London.

> D. H. Kennelly East London Museum

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. Any comments should be sent to The Secretary, International Commission on Zoological Nomenclature, c/o. British Museum (Natural History), Cromwell Road, London, S.W.7, in duplicate and citing the reference number.

1. Validation of the probable vernacular usage of "tergipes" in a generic sense by Cuvier, 1805; suppression of <u>Tergipes dicquemari</u> Risso, 1818, and <u>Tergipes brochi</u> Risso, 1818 (Gastropoda). Z.N.(S.)1044.

2. Grant of precedence to Eolis farrani Alder & Hancock, 1844, over Amphorina alberti Quatrefages, 1944 (Gastropoda). Z.N.(S.)1102.

3. Suppression of <u>Kalydon</u> Hutton, 1884, <u>Murex mancinella</u> Linnaeus, 1758, <u>Triplex foliatus</u> Perry, 1810, <u>Fusus duodecimus</u> Gray, 1843, and <u>Murex</u> <u>hippocastanum</u> Linnaeus, 1758; designation of type-species for <u>Mancinella</u> Link, 1807, <u>Polyplex</u> Perry, 1810, and <u>Thalessa</u> H. & A. Adams, 1853 (Gastropoda). Z.N.(S.)1623.

4. Either (a) removal from the Official List of Specific Names and suppression for the purposes of the Law of Priority of <u>Mytilus anatinus</u> Linnaeus, 1758, or (b) designation of a neotype for <u>Mytilus anatinus</u> Linnaeus, 1758 (Bivalvia). Z.N.(S.)1643.

5. Designation of a lectotype for <u>Turritella kanieriensis</u> Harris, 1897 (Gastropoda). Z.N.(S.)1659.

Particulars of the above will be found in Bull. Zool. Nomencl. vol. 21, part 6 (31 Dec. 1964), and any comments should reach the Secretary before 30 June 1965.

6. Suppression of the generic name Pelta Quatrefages, 1844, or suppression of the family name Runcinidae Gray, 1857 (Gastropoda). Z.N.(S.)580.

7. Suppression of the generic names <u>Acanthochila Mörch</u>, 1868, and <u>Echinochila Mörch</u>, 1869 (Gastropoda). Z.N.(S.)582.

8. Designation of a type species for <u>Limacia</u> Müller, 1781 (Gastropoda). Z.N.(S.)1665. Particulars of items 6 - 8 will be found in Bull. Zool. Nomencl. vol. 22, part 1 (5 April 1965), and comments should reach the Secretary before 5 October 1965.

GENERAL NOTES

Gem. Zeemuseum Miramar Met Natuurhist. Afdeling, Frederiksoord, Gem. Vledder (Dr.), Holland.

This Museum, which contains a very large collection of shells, has now been moved from its original home at Oosterbeek to the above address in the Province of Drenthe. The new building has been provided by the Municipality but Jeanne A. W. Warners (a member of the Society) remains the owner for her lifetime and is the Curator of the Museum.

The transfer of the Marine and Natural History Collections was carried out by the Curator herself! It is hoped to hold an official opening ceremony during June.

For Northern Conchologists.

Since the headquarters of the Conchological Society are located in London it has proved rather difficult for northern workers to maintain contact. It was therefore felt that it might be useful for conchologists in the North of England to meet from time to time to co-ordinate field-work and an informal meeting was held in Atherton at the home of Mr. and Mrs. J. Fogan on 6th. February 1965. Considerable interest was shown and future meetings have been arranged to be held at Bolton Museum by kind permission of the Director, Mr. Vincent Smith.

About a dozen conchologists from various parts of Lancashire, Cheshire and Yorkshire are interested, and joint field-work is planned in making a survey of the present molluscan fauna of as many canals as possible.

Anyone who would care to take part in this survey and can get to Bolton is invited to contact:-

Mrs. Fogan, (telephone:

Manchester.

N. F. McMillan

EXCHANGES

A letter received from Monsieur Scaff-Boust announces that as a result of voyages by himself and his friends, he has for sale a good selection of shells from the Canaries, Cape Verd, the Marquesas, Tahiti, Tuamotu and New Caledonia; other localities will follow. Anyone interested should write for lists to: Belgium.

Lola Elford, U.S.A., wishes to exchange shells - will send list on request - all specimens collected live and fully named.

Eustace A. Tucker, Section 2000, Western Australia, wishes to exchange marine shells - all in good condition and correctly named. A few fossil shells also.

INFORMATION WANTED

Information as to the present location of the collection (mostly British Marine Mollusca) of the late James Simpson of Aberdeen. He was a member of the Conchological Society from 1905 until at least 1938.

- Mrs. N. F. McMillan,

Bromborough, Cheshire.

FOR SALE

Mrs. R. M. Giovanelli (Member) has for sale a wide variety of tropical sea shells in fine condition, all sizes priced individually, although the smaller shells can often be had by the pound. Shell work of various kinds is also manufactured and sold. The stock can be seen at the stock can be stock can be stock can be see

Collection of 4,500 shells, boxed, named, card index cabinet, for sale, including 190 Genera, 1930 Species - mainly 22 Ampularia, 20 Achatina, 25 Buccinum, 110 Bulimus, 10 Callista, 15 Cardium, 32 Cassis, 25 Chione, 10 Circe, 190 Conus, 96 Cypraea, 12 Dolium, 16 Donax, 14 Dosinia, 10 Fasciolaria, 17 Fusus, 15 Haliotis, 6 Harpa, 30 Melania, 110 Mitra, 75 Murex, 43 Nassa, 37 Natica, 28 Nerita, 41 Oliva, 7 Ovula, 40 Patella, 52 Pecten, 12 Pectunculus, 21 Pleurotoma, 6 Potamides, 11 Pteroceras, 42 Purpura, 11 Pyrula, 23 Ranella, 15 Ricinula, 5 Rostellaria, 11 Solarium, 18 Spondylus, 51 Stromus, 34 Tapes, 38 Tellina, 40 Terebra, 8 Tridacna, 43 Triton, 29 Trochus, 9 Turbinella, 32 Turbo, 21 Turritella, 30 Unio, 38 Voluta; enquiries for all or any to:- N. Leech, 2 West Park Drive, Blackpool.

PUBLICATIONS RECEIVED

The Conchology Section, Auckland Institute and Museum (Hon. Corresponding Sec. Mrs. N. Gardner, New Zealand) send the Minutes of the last A.G.M. with the Officers' reports and Membership List. It is encouraging to hear that the Society, with 252 members, has almost doubled its size in the last two years and that even so there have been no crises to worry the Officers. This is a claim which may arouse some envy in other parts. Wisely, the President says that prosperity depends on keeping out of the news! It is awe-inspiring to hear that with one exception, all members of the Council have been regular in attendance at meetings.

Any member wishing to borrow these publications (the Membership List includes the special interests of each collector) should apply to the Hon. Sec. Conch. Soc. of G.B. & Ireland.

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MOLLUSCA IN THE MUSEUM

Part II

Having adequately labelled the material it will need to be classified and stored in the collections. The classification adopted depending to some extent upon the departmental collection policy but will fall into one of the following:-

a) Geographical basis

A non-systematic classification based upon the presence or absence of particular species in a given area, i.e. zoogeographic. This system proves suitable for museums dealing with their own local area but is impracticable for those dealing with zoogeographic or world wide collections since many species have considerable overlap thus resulting in the repetition of a species throughout the collections. This problem is made more difficult as a result of the introduction of alien species to countries all over the world as a result of the activities of man.

b) Economic or medical importance

A classification of this type has many drawbacks, the chief one being that our knowledge of molluscan Rosts for tropical diseases is rather haphazard, thus species believed to be of medical importance suddenly become relegated or vice versa. This type of classification is of little use in the general museum but proves ideal in medical museums in which the chief function will be as a basis for comparison of a limited number of species.

c) Colour and ornamentation

This type of classification is entirely haphazard and of no scientific

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value whatsoever but would prove useful in museums having collections catering primarily for art students or the blind schools.

d) Systematic Classification

This system is based on the relative relationships of the various groups but a classification on this system which uses anatomical details as its main basis produces considerable difficulties since the anatomical structure of only about 5% of recent species is known whilst fossil forms obviously afford few anatomical details. Another disadvantage lies in the fact that some species have no external shell hence if placed in their systematic position would result in spirit material and dry shells being sprinkled at random throughout the collections. It proves necessary, therefore, to modify the system to the best of one's ability.

The best and most comprehensive work dealing with the classification of the mollusca as a whole is that of Thiele which has just been reissued as a Photostat by A. Ashers and Co. Ltd., of Amsterdam, Holland. Even this however has its limitations since it was first published about thirty years ago, thus is considerably out-of-date.

In the case of British Mollusca the relevant census of the Conchological Society of Great Britain and Ireland provide a sound and up-to-date basis for classifying British species.

Labelling. The problem of storage of Mollusca depends upon whether the collections are dry or spirit material; in the case of the former the shells being relatively strong may be stored in cabinets having varying sizes of drawers suitable for the various sizes of shells concerned. The best method encountered dealing with this problem is that of J. Q. Burch of America, who has designed a system of wall cabinets having interchangeable drawers, thus if the systematic position of a particular genus or species becomes altered it simply means rearranging the drawers to suit the revised classification. Also if a genus having large shells is placed next to one having small shells then the problem is overcome by missing a drawer or drawers to give the required depth. The wood used for making these cabinets should be pine or any white wood, oak should be avoided due to calcining. Small species are stored in small tubes or phials and larger forms in plastic boxes, these being similar to those available from Alfred Stanley and Sons Ltd., of Walsall. In the case of very large species these are simply enclosed in polythene bags.

In the case of microscopic forms it would be advisable to make permanent dry-cell microscopic mounts, the slides being kept in slide cabinets together with the collections of radulae, jaws and love darts. If minute shells are to be displayed in plastic or glass topped boxes then they should be mounted on glass wool and not cotton wool due to the risk of calcining which is discussed later. In the case of spirit material this is normally kept in glass containers in cupboards, small nudibranchs and slugs being kept in individual tubes as in the case of Annelids and Arachnids.

The storage of cephalopods proves a considerable problem but is overcome for average sized specimens of up to about five feet by utilising large asbestos or fibreglass tanks fitted with wooden or perspex lids, into which a series of numbered hooks have been fixed. The cephalopod is placed in a perforated polythene bag which is attached to a numbered hook by means of a polythene chain, and then immersed in the propylene phenoxetol solution contained in the tank. The number given to the hook is the same as the one attributed to the specimen thus if a particular individual of a species is required it can be readily found simply by following the polythene chain to the specimen.

The general maintenance of the spirit collection is simply a matter of topping up at regular intervals, but in the case of dry shells is not quite as straight forward as would appear since shells become damaged by the action of mites and damp, thus the drawers of the cabinet should be kept perfectly dry, this being achieved by the use of silica gel. If insect pests are found to be present then it is best to remove the shells before fumigating the drawers as the chemicals may react with the shells.

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Many shells, especially bivalves, tend to crack on being exposed to a prolonged dry atmosphere but this may be prevented to some extent by simply rubbing an oil soaked rag over the surface of the shells about once every twelve months.

Many collectors believe that an accumulation of dust over the shells in a drawer has a protective value but the only advantage this has is that it helps to keep direct light off the shell surface thus preventing loss of colour, this being achieved just as readily by storing in drawers or cupboards.

Once the colour has faded it is extremely difficult to bring it back, the only remedy recommended is simply to wash the shell thoroughly in warm soap suds, rinse in clear water, and then dry thoroughly, finally rubbing the surface with a soft cloth or chamois which has had a few drops of light machine oil placed on it. Some books recommend the use of polishing powder but this should not be used for scientific collections but may be justified in the case of large showy shells used for display purposes only.

Upon keeping shells in storage for a period of years it often happens that specimens become coated with a white powdery deposit associated with loss of colour and decomposition of the shell, this phenomenon being referred to as calcining. It will also be noted that the shells affected are chiefly marine species and that the infection is haphazard, thus shells in the same box may or may not be affected.

The incrustation cannot be brushed off but is found to be soluble in water which, upon chemical analysis, proves to be calcium acetate. The treatment for calcined shells is therefore to soak them thoroughly in warm soapy water to remove the calcium acetate and then allow to dry.

Once dry bring back as much colour as possible by rubbing in oil. The process responsible for calcining is as follows:-

Wood cabinets made of oak emit traces of acetic acid vapour which has difficulty to escape from close fitting drawers. Due to relevant temperature changes throughout the year, some of the moisture present in the atmosphere trapped in the drawer tends to condense during cooler weather, taking some of the acetic acid vapours into solution. Marine shells, especially those which have not been soaked thoroughly, tend to retain traces of sodium chloride, which, being hygroscopic, also tends to absorb acetic acid vapours thus giving rise to areas of high acidity on the shell surface which, being chiefly composed of calcium carbonate, reacts chemically forming the white calcium acetate incrustation.

L'LA

Calcining may be prevented by thoroughly washing and drying all shells prior to storage, avoiding the use of oak cabinets and also periodic opening of the drawers to enable any acid fumes to escape. Further prevention can be taken in the form of rubbing the shells with oil as for bringing back colour. In the past people tended to varnish their shells for this purpose but this practice together with glueing specimens to tablets should be discouraged since on drying the varnish or glue shrinks and cracks often resulting in damage to the shell itself.

There is also evidence that calcining can be produced as the result of bacterial action upon cotton wool with the production of traces of volatile acids which will similarly attack the calcium carbonate of the shells, and for this reason it is best to use glass wool if specimens should need special packing or storage.

It has also been claimed by H. K. Barnard that small shells should not be placed in corked glass tubes since, due to temperature changes, volatile vapours exuded from cork and glass (?) react with the shell to form butyric acid crystals. Here again the tubes may be stoppered with a plug of glass wool.

If a shell in the collection is broken and it is necessary to repair it the best medium to use for sticking the parts together is Durofix or clear Bostik, both of these having the advantage that they may be removed if necessary using acetone.

After a period of two or three years the local area will have yielded the

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majority of its species thus if comparable material from other areas is required the problem arises as to how this may be achieved. In order to obtain British examples the best way is to write to the Secretary of the Conchological Society of Great Britain and Ireland explaining your requirements and asking for help from members of the Society. To obtain foreign material contact the local Museums or Universities in the area in which you are interested and explain your requirements asking to be put in contact with any local collectors who may be interested in exchanging material for British shells from your area.

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F. R. Woodward

FIELD MEETING

The field meeting held at Folkestone on the 28th. March 1965 had the dual purpose of obtaining records for the marine census at East Wear Bay and collecting fossils from the Gault at the Warren.

Five of the members present investigated the beach in the morning with disappointing results. The beach - a mixture of rocks and sand - showed a surprising lack of bivalves. Apart from clusters of smallish mussels on the rocks only one dead shell of Ensis ensis was found. There were no traces even of broken bivalves amongst the beach debris.

The Gastropods consisted of the more common rock-dwelling species with Littorina littoralis predominating. These showed good colour variations and many of the shells were particularly large.

The list of species found is appended below:-

GASTROPODA

LAMELLIBRANCHIA

Mytilus edulis

Ensis ensis One shell only.

Α.

Patella vulgata A. Crepidula fornicata B. Gibbula cineraria B. Buccinum undatum B. Nassarius reticulatus B. Nucella lapillus A. Littorina littorea A. Littorina littoralis A.

Littorina saxatilis saxatilis A.

R. Fresco-Corbu

FIELD MEETING

Norbury Park, Mickleham, Surrey, 3rd. April 1965. Leader, A. E. Ellis; 10 members and friends present. The principal objective was living <u>Vitrina</u> <u>major</u>, but although, as last year, shells suspected of belonging to this species were picked up, the only living <u>Vitrina</u>, which were collected and dissected by Dr. Lloyd Evans, proved to be <u>V. pellucida</u>. The following is a complete list of the Mollusca hitherto recorded from this favoured locality; those of which only dead shells have been found are indicated by an asterisk.

Pomatias elegans	Monacha cantiana
Acicula fusca	Helicella itala*
Carychium tridentatum	Punctum pygmaeum
Azeca goodalli	Discus rotundatus
Cochlicopa lubrica	Arion intermedius
C. lubricella	A. circumscriptus

Pupilla muscorum Acanthinula aculeata Vallonia excentrica Ena obscura Marpessa laminata Clausilia bidentata C. rolphi Cecilioides acicula Testacella scutulum Helicodonta obvoluta* Helicigona lapicida* Arianta arbustorum Helix hortensis H. nemoralis H. aspersa H. pomatia Hygromia striolata H. hispida

Arion hortensis A. ater Euconulus fulvus Vitrea crystallina agg. V. contracta Oxychilus cellarius 0. alliarius 0. helveticus Retinella radiatula R, pura R. nitidula Vitrina pellucida V. major* (?) Milax budapestensis Limax maximus L. marginatus Agriolimax reticulatus

SUBSCRIPTION

We are all only too familiar with the depressing way everything gradually becomes more expensive, and the Council wishes to assure you that they have waged a long and losing battle over the last twenty years against any rise in subscription; the last increase was in 1946.

As we hope you agree, both the quantity and juality of the services available to members have steadily improved, but there have been rapid rises in expenditure also. The annual cost of publications - including the cost of the newly-established Newsletter - sent annually to each member, now stands at $\pounds1.13.0$ - and this sum will inevitably increase; costs of notices, postages and stationery have also gone up. It must therefore be evident to all that the time has come when an increase in subscription must be faced. The Council has no alternative but to recommend a substantial increase to ensure that the standard of publications will continue to be maintained, and that there should be no further increase in the foreseeable future.

You are invited therefore, to a Special General Meeting of the Society, to be held at the British Museum (Natural History) on October 16th. 1965 (before the Ordinary Meeting on that date), for the purpose of authorising, if thought fit, the increase to $\pounds 2$ and $\pounds 40$ respectively, of the subscriptions for Ordinary and Life membership.

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