ACQUISITION POLICY IN PALAEONTOLOGY

by W. D. IAN ROLFE

ABSTRACT. A survey of twenty-three United Kingdom museums with major geological collections shows that only two have formal, published acquisition policies. Stated policies help to prevent random expansion, simplify problems of storage, conservation, and documentation, save curatorial time, and frustrate illicit trafficking in fossils. Additions are suggested to the Code of Practice for Acquisition to Museums, covering 'rescue collection' and guide-lines for field-work. A more rational approach to acquisitions is advocated: large-scale reference collections need not be an aim of most museums, as at present. Museums could co-operate more actively in the future by collecting in taxonomically or stratigraphically defined areas that are mutually exclusive. Each museum could voluntarily assume particular responsibilities in collecting, building on existing strengths. A prerequisite is the publication and discussion of lists of such responsibilities, in the Geological Curators' Group *Newsletter*. Museums would then redirect collections outside their particular responsibility to the more appropriate repository. Discussion of the retroactive application of such a policy to existing collections is premature: future collecting policy should first be agreed.

ALTHOUGH many areas of museum endeavour, such as exhibition, education, and conservation have made remarkable progress in recent decades, little progress has been made in defining current collecting policies. The *ad hoc* approach, which formerly characterized all museum activities, still largely dogs collecting: is this situation desirable, or inevitable?

In an attempt to discover the current situation, twenty-three United Kingdom museums with well-known palaeontological collections were asked for statements of their current collecting policy. Only four museums had up-to-date policies, and only one of them had published its policy—Leicestershire Museums Service (Boylan 1976*a*, 1977*b*)—although an additional three museums had internal, discussion documents. Several institutes replied that they had no policy, while others followed tacit policies, which may be the outcome of a well-understood function. The Geological Museum (Institute of Geological Sciences) exemplifies this situation, and Dr. Adrian Rushton has kindly traced the Geological Survey's original published policy (Forbes 1844 *in* Wilson and Geikie 1861, pp. 378–379) which is effectively still followed. Doubtless published statements could be found to validate the collecting policies of other old and large museums.

THE NEED FOR POLICY

Given this general lack of stated policies, therefore, it can be asked, why should one have a policy at all?

First, because such a policy can help to prevent random expansion of the collections. Purposive collecting upgrades, rather than simply accumulates, the collections (Harrison 1969; Hoving 1973). Like the museum within its own community, so the community of museums 'should seek that niche in which it can succeed, and there is no particular reason why this niche should be the same in all communities' (Squires 1973, p. 11). 'Undisciplined growth of collections is detrimental to their usefulness' (Cowan 1969, p. 614): 'stop indiscriminate collecting'

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(Rosewater 1969, p. 669)—such statements indicate that this point has been formally accepted, at least in the United States.

Secondly, because it simplifies the problems of storage, conservation, documentation, finance, and, not least, of curatorial time (Nicholson 1975, p. 303). 'Not just a few curators are virtually enslaved by the sheer burden of the routine daily transactions and public service, when in fact they should be practising science. The quantitative growth of the world's [collections] has overwhelmed us and become an end in itself, such that we spend all of our time packing away specimens for a research day that never comes. At the same time we find ourselves incapable of retrieving the most elementary information' (Shetler 1969, pp. 730, 740; also Sokal and Sneath 1966, p. 15).

Thirdly, so that we can be seen not to be stimulating illicit trafficking in fossils (Nicholson 1975, p. 299). As the New York State Attorney General pointed out in discussions following investigation of the Metropolitan Museum of Art's practices, 'museums ought to govern themselves on such matters, not wait until restrictive practices are forced on them through legislation or through control of governmental investigative bodies' (Nicholson 1974, pp. 5, 6).

We have recently seen the commotion in the British national press over the unscrupulous raiding by foreign private collectors of fossiliferous localities, including Sites of Special Scientific Interest (Gittins 1977; Rolfe 1977; Saxon 1978; Silcock 1978). This is the palaeontological equivalent of the looting of Turkish and Italian tombs for art treasures (Meyer 1974), which led to the flurry of national and international legislations (Anon. 1969–1973; Hoving 1973; Nicholson 1974, 1975; Zelle 1972) in an attempt to reduce the 'illicit import, export and transfer of ownership of cultural property', to quote the UNESCO 1970 Convention (which deals with 'objects of palaeontological interest' in its Article 1 (a); Articles also given by Meyer 1974). Such looting was to supply private collectors, yet private collections eventually enter public museums by gift or purchase. As dealers have pointed out, it is often museums which are willing to pay high prices (Burnham 1975, p. 144). There is no assessment of this factor in the palaeontological world. The British Museum (Natural History) records that only 3·6% of its 275 000 fossils acquired in 1963–1974 were purchased, yet this is a significant number of specimens, acquired from around the world.

Collecting policies are therefore one way of frustrating such illicit collectors, although the implementation of regulations controlling export is probably more effective (Burnham 1975, p. 152).

POLICIES FOR PALAEONTOLOGY

General. Accepting therefore the clear need for collecting policies, what should these be for palaeontology? One must presuppose endorsement of a general Code of Practice for Acquisitions to Museums, such as that suggested by the Museums Association (Boylan 1977*a*, pp. 107–108; also *in* Maliphant 1978) and which incorporates many elements of the previously mentioned 1970 UNESCO Convention on the means of prohibiting and preventing the illicit import, export, and transfer of ownership of cultural property. Another useful clause, which may be appropriate in

view of some of the palaeontological rescue work being undertaken by the Geological Curators' Group, can be added from the Museum Assistants Group Code (Anon. 1974, pp. 14–15): 'Where a potential acquisition is threatened with certain destruction unless it becomes part of a museum collection, the above [Boylan 1977*a*] considerations may have to be waived; but only if the curator is satisfied that a home cannot be found for the specimen in a relevant collection.' To these should also be added most of the guide-lines for biological field-work (Hairston 1970), which can be regarded as applying to palaeontology. These guide-lines state, for example, that scientists should correspond with appropriate scientific authorities in the proposed country of research collecting, inform them of proposed research in ample time to develop co-operation, and divide resultant collections between host country and collecting country. Although most responsible institutes have, of course, long followed such precepts, the fact remains that one still hears disturbing examples of senior scientists flouting such guide-lines.

The International Council of Museums (ICOM) attempted to give its own Code of Acquisition (Zelle 1972) more bite, by inviting signatories 'to give preferential treatment in all professional activities to other museums adhering to the code'. One wonders how many United Kingdom museums have signed the ICOM recommendations, and what palaeontological preference is being shown? A further useful outcome of ICOM's work has been the handbook summarizing the cultural property laws of each country (Burnham 1974), an essential work if museums are not unwittingly to infringe each other's countries' laws (see also Nicholson 1976).

Current policies. From Table 1, prepared from returns made by the twenty-three museums listed, practically all museums have a policy of collecting general exhibition and/or teaching material, and most try to build up reference, study, or comparative collections. This immediately raises the question of whether it is realistic for *all* such museums to attempt to do so for all groups. Should not such massive ambitions be restricted to the national museums, and on a more confined scale, to the proposed regional 'centres of excellence' (Torrens 1977)? For what purpose do all museums wish to amass such collections? For identification of rarities? Should not locally insoluble problems be sent to the national centres for identification—as of course largely occurs at present? (And conversely, local problems might well be referred back to local museums, so that local curators encourage local contacts.) A more pastoral *modus vivendi* is required between our national museums and the non-national museums. Just as we expect to co-ordinate with foreign countries when collecting there, should not the national museums liaise with relevant local government museums when collecting in their terrain?

Passing over this problem, we come to points of difference between the categories of museum shown in Table 1. As we might expect, local government museums largely collect local regional material, and the responses to the survey indicate that this is increasingly accepted as the prime responsibility of this category of museum. It seems to be one area of collecting policy that is well defined and recognized and which, with the exception of the biostratigraphical minimal samples held by the Institute of Geological Sciences, gives them a largely mutually exclusive role, particularly with the refining of many policies since regionalization. Only two local museums pursue

Museum	Exhibit/ Education	Reference	Local/ Regional	Speciali- zation	Research	Formal policy
National Museums						
1. British Museum (Natural History)	×	×		×	×	
2. Institute of Geological Sciences:						
a. London	×	×	×	×	×	
b. Leeds		×	×	×	×	×
c. Edinburgh		×	×	×	×	
3. National Museum of Wales	×	×	×	×	×	
4. Royal Scottish Museum	×	×	×	×	×	
5. Ulster Museum	×	×	×	×	×	
University Museums						
6. Birmingham University	×			×	×	
7. Grant Institute, Edinburgh	×	×	×	×	×	
8. Hancock Museum, Newcastle	×	×	×	×	×	
9. Hunterian Museum, Glasgow	×	×		×	×	
10. Manchester Museum*		×		×	×	
11. Oxford University	×	×	×	×	×	
12. Sedgwick Museum, Cambridge		×		×	×	
Local Government Museums						
13. Bristol	×		×			
14. Buckinghamshire County			×			
15. Exeter	×	×	×			
16. Leicestershire County	×	×	×			×
17. Merseyside County	×	×	×	×		
18. Nithsdale District	×		×			
19. Norfolk	×	×	×	×		×
20. North Yorkshire			×			
21. Sheffield	×		×			
22. Tyne and Wear County		×	×			×
23. Warwickshire County	×		×			×

* Museum with local government role also.

TABLE 1. Categories in which surveyed museums currently collect, and whether the museum has a formal policy

specialized collecting as well: Merseyside County Museums with their Triassic footprints of *Chirotherium*, Carboniferous Limestone invertebrates, and Quaternary molluscs, and Norfolk with its Quaternary vertebrates and invertebrates, and Upper Jurassic (especially Kimmeridge Clay)–Cretaceous invertebrates and vertebrates (especially reptiles). But even these could be regarded as primarily *local* strengths, and not specializations in the sense intended here. Such specializations are usually areas of collection in which the museum has been recognized to be strong for a long period, and therefore it has seemed sensible to build on that strength. It is important to discriminate such collecting from that based on current or future requirements (including research collections—see below). If no research is prosecuted on material accumulated under a 'building on strength' policy, one wonders why such collecting continues. If, however, such specialization could be accepted as the basis for a United Kingdom-wide co-operation on collecting policies, it would have a greater rationale. Should we each take on a particular responsibility in our current collecting? Thus,

the Hunterian Museum has excellent collections of Scottish Carboniferous freshwater bivalves, due to the work of Trueman, Weir, Leitch, and Eagar. Yet there is no active research in Glasgow based on these collections. Should we build on these collections?

Future policies. As I have previously pointed out (Rolfe 1969, p. 7), an analogy exists in the Background Material Scheme of United Kingdom libraries (Anon. 1967; Onians and Hill 1955). Since 1955, forty-three libraries have been co-operating to buy minor works published before 1869—works which otherwise would not be collected by any British library. Each library collects within a ten-year period of publication—Glasgow, for example, collects books published between 1690 and 1699, and had purchased 486 volumes up to 1975: the whole scheme had recorded 9391 volumes collected up to 1975. Now although only remotely analogous to museums' collecting problems with fossils, could we not apply some lessons from this to our own case? Could we not agree to collect, in addition to our own normal use collecting, in taxonomically or stratigraphically defined areas that would be mutually exclusive? There are precedents for such co-operation: many years ago some of the large systematic botany centres with interests in Latin American plants agreed how to divide up the job of tropical plant collecting. The plan worked well and is still partly operated by the participants (Cowan 1969, p. 614). A similar co-operative agreement between industrial and technology museums was achieved by the East Midlands, and a schedule of specialization published (Boylan 1976*b*). An agreed national strategy would have a strong claim for more central finance for museums. 'Any government would be less than prudent to sink large sums of money into its [museums] without first requiring conscious co-operation that takes cognizance at a planning level of the actual network formed by the existing [museums], and divides the responsibilities so that duplication of resources and services is minimised' (Shetler 1969, p. 736).

It is more profitable to consider such a future collecting policy than to contemplate the more difficult question of applying it retroactively to collections already in museums, although such inter-institutional transfer by long-term loan has been advocated (Cowan 1969, p. 615), as has the repatriation of type specimens (Nuorteva 1973). Such long-term loans have already taken place, as exemplified by the loan of Darlington's natural history collection to Tyne and Wear authority (F. R. Woodward pers. comm.). The first prerequisite before any such future policy could be implemented is the listing of specializations, or particular responsibilities, by museums, and this could well be published in the Geological Curators' Group *Newsletter* (as well as in the *Museums Yearbook*). Tables 2 and 3 show samples of the kind of entry that would suffice for an initial listing. Museums would then pass on material outwith these categories to the museum with the relevant listed specialization. This already occurs informally, of course, at many museums: the Hunterian Museum, for example, has recently redirected Welsh Borderland material to the National Museum of Wales, and Norwegian material to the Palaeontologisk Museum, Oslo, both collections resulting from Ph.D. research projects at Glasgow University. For over twenty years, H. V. Radcliffe has followed a policy of recording and redirecting to relevant museums, material that is not relevant to Newark Museum's collections, passing on an average of *c.* 12% of its acquisitions annually.

TAXONOMIC INDEX

ALL TAXA: Britain (1, 2*a*, *b*, 3)
Scotland (2*c*, 4); Wales, Welsh Borderland (3)
TRACE FOSSILS: Triassic, *Chirotherium* etc. (17); Phanerozoic (7)
BRACHIOPODA: Lower Palaeozoic (3, 7, 9, 11)
MOLLUSCS: Pleistocene (19), Quaternary (17)
non-marine bivalves: Silesian (9, 10)
GONIATITES: Namurian–Westphalian, British (10)
Carboniferous, Scottish (9)
AMMONITES: (11)
Mesozoic, Yorkshire (10)
ECHINODERMS: (15)
ARTHROPODA: Palaeozoic (9); trilobites (3), British, Scandinavian (7), Quaternary insects (6)
GRAPTOLITES: Southern Scotland, North-east England (7), Northern Ireland (5)
VERTEBRATES (general): Jurassic (11), Cretaceous (19); Pleistocene (15, 19)
FISH: Palaeozoic (4, 8)
AMPHIBIA: Palaeozoic (8)
REPTILES: Jurassic (11), Upper (19)
BIRDS: Quaternary, North Midlands caves (11)
MAMMALS: Giant Irish deer (5)
Quaternary, North Midlands caves (11)
PLANTS: Coal Measures Britain (8, 10)
Mesozoic, Yorkshire (10)

STRATIGRAPHICAL INDEX

ALL HORIZONS: (2*a*–*c*, 3, 4)
PALAEOZOIC: arthropods (9)
LOWER PALAEOZOIC (general):
faunas (3, 12)
faunas: Northern England, Southern Scotland (especially Pentlands) (7), South-west Scotland (9), Wales (3)
brachiopods (9)
ORDOVICIAN:
Budleigh Salterton Pebble fauna (15)
CARBONIFEROUS (general): Northern England (8)
invertebrates—Dinantian, Northern England (17), South-west province (3)
rugose corals—Scottish (7)
goniatites—Scottish (9), Namurian–Westphalian; British (10)
LOWER CARBONIFEROUS (general): Irish (5)
SILESIAN:
non-marine bivalves: Britain (3), Ireland (5)
North America, Spain (10); Scotland (9)
plants: Britain (10)
TRIASSIC:
trace fossils, footprints *Chirotherium* etc. (17)
faunas, Irish (5)
MESOZOIC (general): ammonites, plants: Yorkshire (10)
JURASSIC:
faunas (3, 11)
UPPER JURASSIC, especially Kimmeridge Clay, invertebrates, vertebrates (especially reptiles) (19)
CRETACEOUS: faunas (11)
invertebrates (15, 19)
vertebrates (19)
QUATERNARY: invertebrates (19), especially insects (6)
vertebrates (19)
mammals, birds (10)

TABLES 2 and 3. Taxonomic and stratigraphical indices, showing examples of current collecting specializations. The indices are not meant to be exhaustive, but show the type of list that could be published to serve as a basis for further discussion of particular responsibilities in collecting. Numbers in parentheses indicate the museums as listed in Table 1

Clearly, the greatest disincentive to any such scheme is the lack of personal motivation that an individual curator might feel towards the collections for which his museum had accepted responsibility. Curators collect most actively and effectively in areas to which they have a research commitment, and this might well lie outside a museum's particular responsibility. This brings us to the fifth category of acquisition —research collections, made to initiate or augment a research project. From Table 1 it is immediately obvious that such collecting occurs only at national and university museums, as might have been expected. The dilemma posed here is—how can such short-term, changing research collection requirements be equated with any long-term particular responsibility collecting? One way would be for research collections to pass to the relevant 'particular responsibility repository', when research has 'ended'.

A final acquisitions policy category, not listed on Table 1, is that of 'rescue geology' —the collection of representative samples from temporary or threatened sites. Although most museums do this from time to time, only one museum mentioned it in its statement of current collecting policy—Bristol City Museum. Some monitoring of significant temporary exposures, such as those notified from time to time by the Nature Conservancy Council, and of bore-holes, is undertaken by the Institute of Geological Sciences. But more exhaustive rescue collecting will probably have to await development as a natural extension of the National Scheme for Geological Site Documentation. Manpower shortages are likely to continue to be the problem here, although the Special Temporary Employment and Youth Opportunities Programmes offer solutions in some regions.

Are the foregoing suggestions for the evolution of co-operative collecting policies in palaeontology Utopian? Would we do as well to rely on producing good catalogues of our collections with, hopefully, regularly issued union catalogues, so that we all know what is where? Only curators can decide these matters: perhaps 'the time is here if not past when a qualitative innovation in [museum] building and management is needed' (Shetler 1969, p. 740).

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DISCUSSION

M. G. Bassett. How do we deal with changes in museum personnel in relation to specializations in policy? I was intrigued when Dr. Rolfe first wrote to me on the matter he has just discussed, since in the museum where I work, for example, it is difficult to differentiate between what Dr. Rolfe would regard as museum specializations and my personal interests. My research interests are specialized at the moment but are not necessarily a reflection of the museum specialization as a whole. The point I am making is that, if or when I should leave the National Museum of Wales, my place would probably be taken by someone with different research interests and he would accumulate different kinds of collections; in this way the museum specialization would also change. In your own case in the Hunterian Museum you currently have two specialists who work on different groups of arthropods, and you are presumably building up collections in these fields. In order to maintain these specializations, would you see the Hunterian Museum always having specialist arthropod workers on the staff?

W. D. I. Rolfe. There should be no conflict between areas of an individual curator's research and his museum's particular responsibility. Ideally, but rarely, they will coincide. Where they are not coincident, however, this means that once the individual's active research ceased on a project, the material could be forwarded to the museum whose particular responsibility it is.

M. G. Bassett. The principle of such an action might well be admirable, but there will almost certainly be difficulties in practice. In many cases, for example, collections for both research and other purposes are made using funds granted directly by a particular institution, i.e. they make an investment in building up collections, but I am not sure that any institution would be happy to see its investment simply transferred elsewhere.

H. W. Ball. The value of the BM(NH) collections lies in their universal coverage. Our science is one of comparison, and it is enormously helpful to have a large range of comparative material immediately available. For this reason the current trend towards palaeontological chauvinism and its attendant restrictive legislation is to be deplored. However, the BM(NH) must now be responsive to national needs, and so its resources may have to be redeployed from time to time. This will result in work being discontinued on specific taxa, especially if they are adequately covered in other institutions. The existing collections will, of course, continue to be curated and conserved, but further active acquisition of material may cease.

W. D. I. Rolfe. As an example of the point made by Dr. Ball, the BM(NH) has now ceased to actively collect graptolites, and by mutual agreement has re-assigned this responsibility to the Sedgwick Museum, which of course has long been regarded as a centre for such studies. This seems to be an excellent, previously unknown example of the 'particular responsibility collecting' that I was calling for. Can we not build on, and extend from this shining example?

R. B. Rickards. What seems to be a problem is how much we want to develop the formal arrangement between museums. Relationships between individual curators are now much better than in the past, and it may be that an informal system would be more efficient.

W. D. I. Rolfe. Accessions have increased in most museums at a phenomenal rate. We are being inundated with specimens, and with the small number of curators available it means that we must agree amongst ourselves on policies. There is so much for everyone to do that we need to collaborate.