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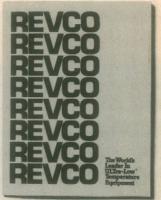
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COVER

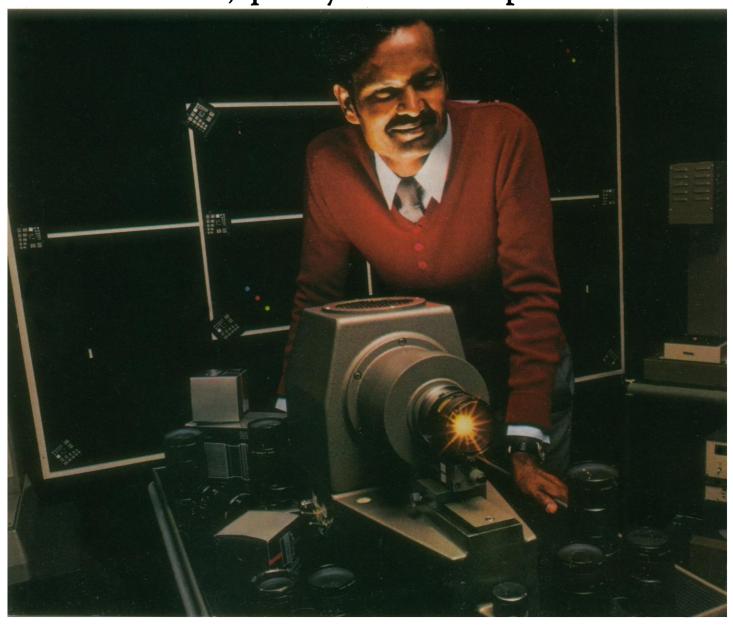
Sea anemone (Anthopleura xanthogrammica) in a tide pool beneath mussel beds, Torch Bay, Alaska. Sea anemones capture mussels released by wave action and by sea star foraging. Mussel beds also serve as "nursery" areas for juvenile anemones which grow and then move downward into pools and crevices. Larval selection or differential survival in mussel beds provides a convenient mechanism for anemones to home in on what will be the most common adult prey. See page 785. [K. P. Sebens, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138]

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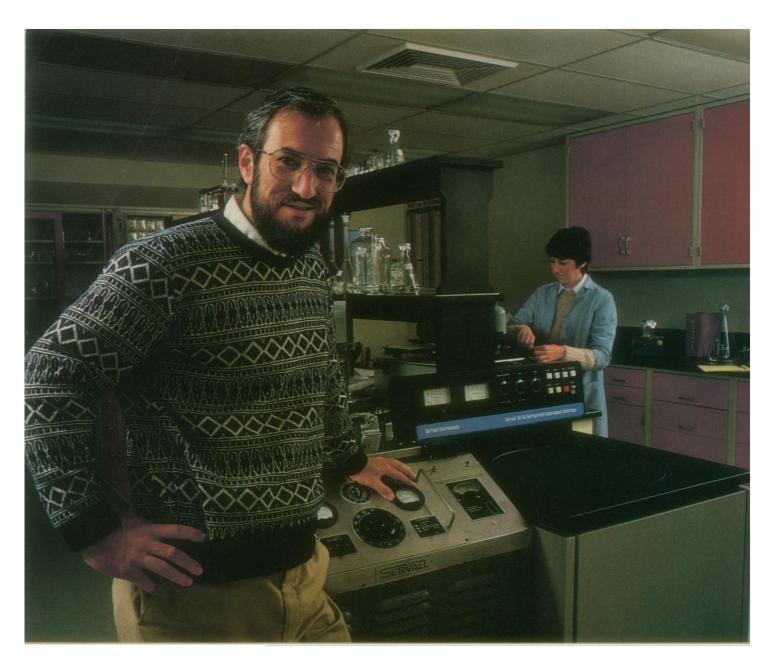
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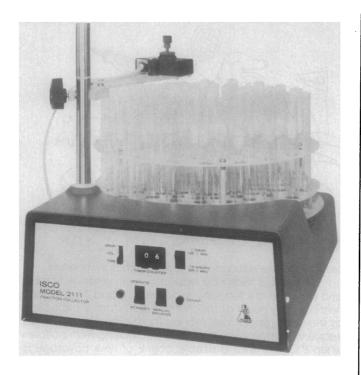
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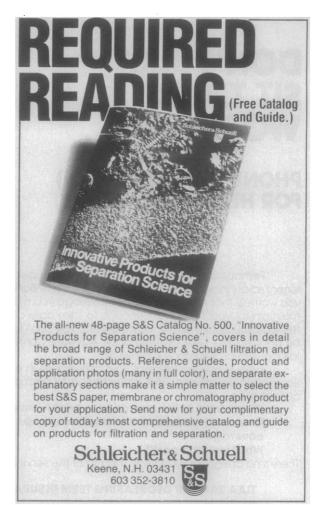
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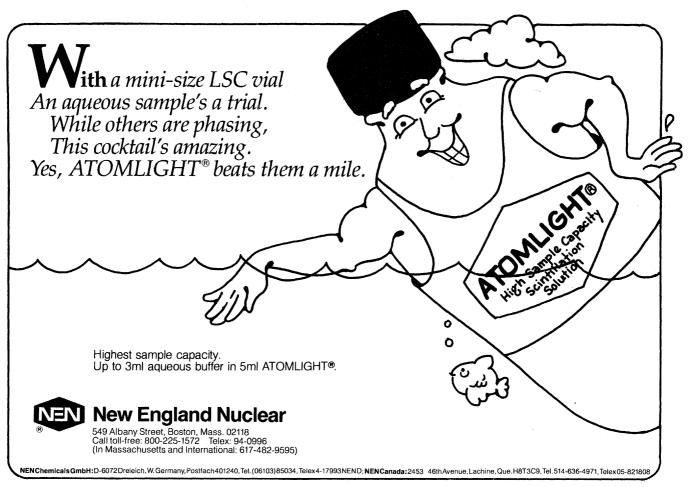
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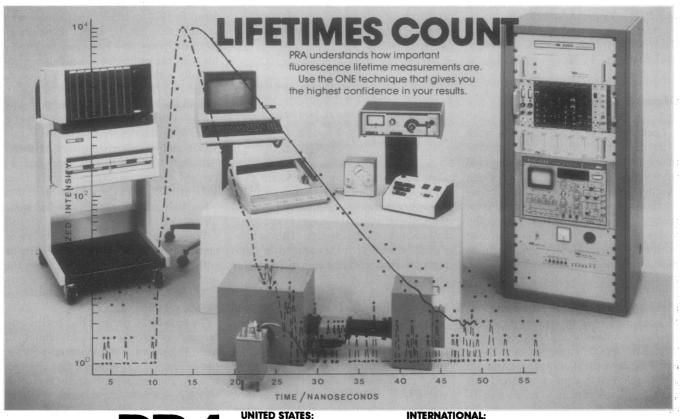


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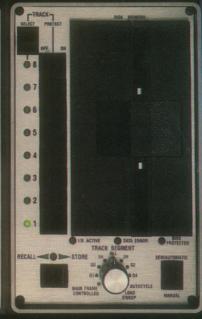
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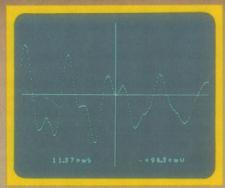




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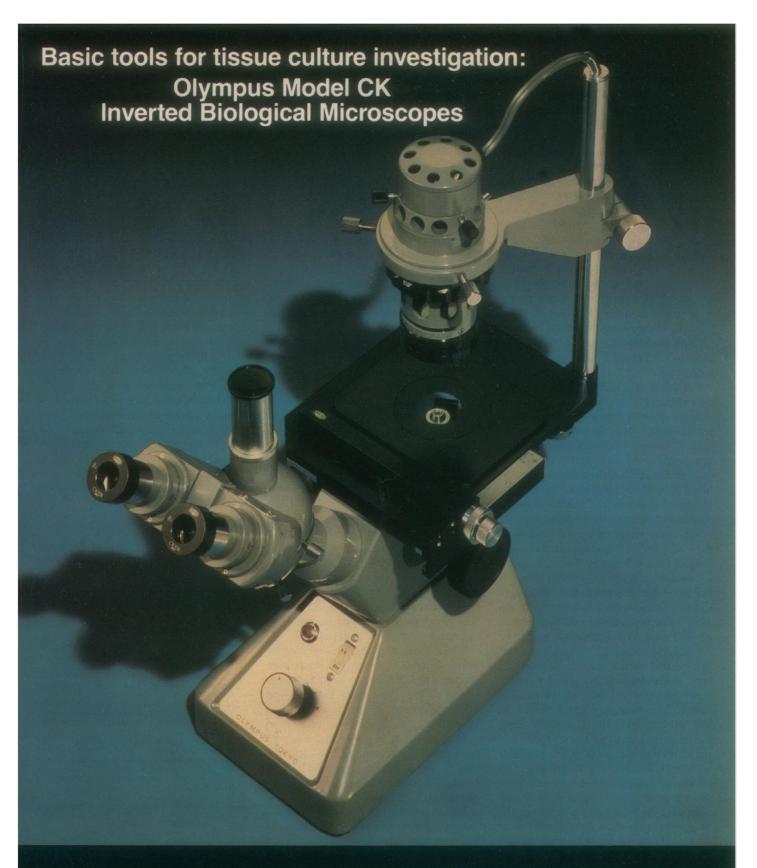


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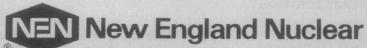
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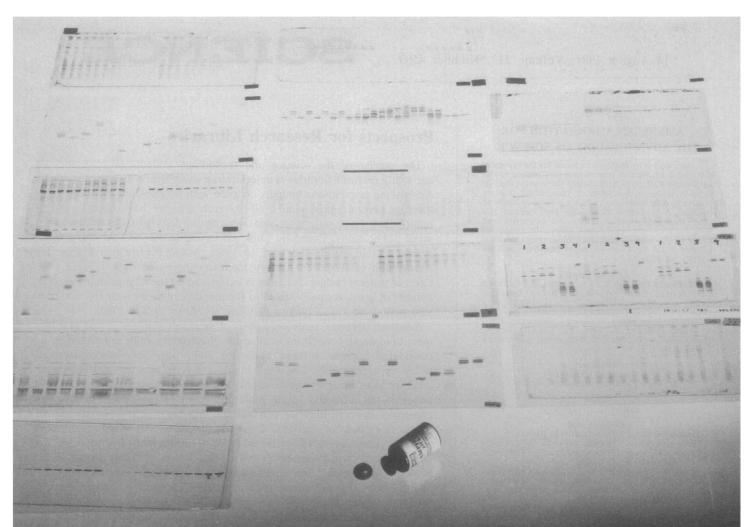
Prospects for Research Libraries

The quality of the science and technology collections in America's university research libraries is deteriorating under the onslaught of stable or diminishing acquisitions budgets coupled with double-digit inflation. Over the past several years, almost all research libraries have been forced to reduce their book purchases and subscription lists to journals and other serial publications. Domestic book prices increased 3.5-fold and journal prices 3.3-fold during the past 10 years, while the median budget for Association of Research Library members increased only 1.7-fold. The effect of modest budget increases is evidenced by the change in the median number of gross volumes added to the member libraries over the same 10year period: 94,314 in 1969 to 1970 and 67,742 in 1979 to 1980.

Research libraries' traditional goals of local self-sufficiency and development of in-depth collections in all areas of active research can no longer be considered realistic. Instead, collection policy now reflects the needs of today's programs only. Collecting in areas of peripheral research interest is a luxury most libraries can ill afford. The long-term implication of current policy is not attractive. With materials acquired principally in areas of immediate interest, libraries will lack the breadth to accommodate new or changing research directions. Collections will exhibit discontinuities as areas of current interest flourish and those of former interest wither. For the library user it will mean fewer books and journals locally available for browsing—a popular information-gathering habit of many researchers. Journal titles that are prime candidates for cancellation are less-used or foreign-language titles. With most libraries in similar straits, the same titles may be chosen for cancellation across the country, leading to the virtual disappearance of current subscriptions to certain titles, such as foreignlanguage specialty journals. Another problem is the inevitable increase in subscription prices as production costs are distributed over fewer subscribers.

Increased interlibrary borrowing is a possible solution to satisfy local needs, but the system as currently conducted has problems. It tends to be costly, and the wait involved means decreased productivity and can cause loss of project momentum. Most large libraries have noted an increase in interlibrary loan traffic. For example, in-state borrowing from Southern Illinois University at Carbondale has about doubled in the past 4 years. There are several reasons for this. Rising journal prices have caused many individual scientists and small academic libraries to pare their subscription lists, and both groups are relying on using or borrowing material from research libraries to satisfy their needs. On-line bibliographic searching has contributed to increased demands for interlibrary loans as computer-based systems identify obscure but pertinent sources of information.

The most practical solution to the library budget crunch is the adoption by libraries of computer technology to assist the development of resourcesharing systems. But development of faster, more efficient delivery systems is essential to their success. Library computer networks are still in the early stages of implementation. Four networks, the Research Libraries Group, the Washington Library Network, the University of Toronto Library Automation System, and OCLC, are in the process of consolidating their positions within the American library community. The first step toward network resource sharing was taken in 1979, when OCLC initiated its interlibrary loan subsystem. To date, the networks have emphasized services such as shared cataloging over resource sharing. Computerized book holdings lists are commonly available, but the programming to integrate journals and serials into the systems is inadequate. Incompatibilities between computing systems also limit communication and cooperation between networks. All in all, it appears that the future of the research library lies in interlibrary cooperation mediated by computerization of library routines. Thus equipped, we should be better able to match the user and the information with a minimum of wasted time and resources.—George BLACK, Morris Library, Southern Illinois University, Carbondale 62901



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