

population has declined from an estimated 100,000 thirty years ago to about 1000 today, the blue whale is now completely protected.) In 1965-66 the catch limit was 4500 blue whale units; last season it was 3500.

The commission at its meeting also decided to extend the ban on killing humpback whales in the North Pacific area for a further three years and to extend to the whole of the Southern Hemisphere the ban on the taking of blue whales, thus making the ban complete.

Saving the whales would seem to require that catch limits be extended to all regions and to the activities of land stations. Outside Antarctica last season, 24 land stations and seven factory ships accounted for 29,536 whales and a total of 929,194 barrels of oil compared to 600,130 barrels from the 1966-67 catch in Antarctic waters. There is a fear, apparently well-grounded, that the reduction of quotas in the Antarctic will drive whalers to heighten the attack on sperm whales outside Antarctic waters where female breeding stocks are found.

The obvious weakness of the IWC is that it depends on voluntary cooperation without sanction of international law. In recent years, the commission has been able to speak with greater certainty about whale stocks because of advances made in the study of whale population dynamics and because of the help of its own scientific committee and of a whale stock assessment group formed by the United Nations Food and Agricultural Organization. Concerning noncooperation from some nations that conduct whaling from shore stations and do not belong to the commission and concerning infractions by its members, the commission must speak softly since it carries no stick.

A perennial disappointment for the commission has been its failure to achieve a workable inspection system. In 1963, an agreement was reached on an international observer scheme which would have placed inspectors from other nations on whale-catching ships. The agreement was never implemented and ran out last year. Supervision of catches now depends on government inspectors who sail on their own country's vessels. This year a working group of the commission recommended that a system of regional inspection schemes should be initiated to provide for stationing of inspectors of one na-

tion on factory ships or land stations of another. Work on the scheme, however, seems to be in abeyance.

The great difficulty for the commission is that the pelagic whaling nations are reluctant to see restrictions tightened further. The Japanese depend on the whale catch as an important source of food protein, and Japanese owners have a big unamortized investment in their commercial whaling fleet. The Soviet Union, with its formidable state-owned whaling fleet, might be more amenable to mothballing part of the fleet during a period of low-catch limitation, set to allow whale stocks to recover. But the Soviets, who have worked on a lower national quota than the Japanese, have been pushing for a bigger share for themselves of whatever total is being taken.

The IWC is explicitly barred from setting national quotas. These are set by the pelagic whaling nations on the basis of the IWC total catch limit, and each year it seems to get harder. The three interested parties met in London after the recent IWC meeting to try to work out shares, but failed to agree. They will meet again this month, but nobody is quite sure what will happen one day if they finally can't agree.

What almost everyone, from the pelagic whaling nations and elsewhere, does agree on is that the writing is on the wall for the whales. Conservation principles and long-run economic interests both dictate that lower kill quotas be set to raise sustainable yields in the long run. But logic and sentiment seem to need the support of workable law.—JOHN WALSH

APPOINTMENTS

James T. Grace, Jr., assistant director, to director, Roswell Park Memorial Institute, succeeding George E. Moore. . . .

Seymour Katsh, on leave from the position of professor of pharmacology, University of Colorado, Medical School, to metabolic biology program director, NSF. . . . **Alan M. Kraft**, director of the Fort Logan Mental Health Center, Denver, to director of the 500-bed psychiatric hospital to be built in Al-



J. T. Grace, Jr.

bany by the New York State Health Department of Mental Hygiene, and professor of psychiatry, Albany Medical College. In September 1968, he will become chairman of the department of psychiatry and psychiatrist-in-chief at Albany Medical Center, succeeding **William L. Holt**, who will retire. . . . **Victor M. Blanco**, director, division of astronomy and astrophysics, U.S. Naval Observatory, Washington, D.C., to director of the Cerro Tololo Inter-American Observatory, La Serena, Chile. . . . **Philip Oetking**, research geologist, Southwest Center for Advanced Studies, to director of the newly established Ocean Science and Engineering Laboratory, Southwest Research Institute. . . . **Glenn Terrell**, dean of faculties, University of Illinois at Chicago Circle, to president of Washington State University. . . . **Katherine B. Oettinger**, chief of the Children's Bureau, HEW, to deputy assistant HEW secretary for family planning and population.

RECENT DEATHS

Russell J. Beers, 56; associate professor of bacteriology and adviser to undergraduate students in bacteriology, Iowa State University; 24 July.

Raymond M. Hainer, 49; senior vice president and head of the research and development division, Arthur D. Little Company, Cambridge; 25 August.

Myrtle E. Johnson, 86; professor emeritus of zoology, California State College, San Diego; 16 August.

Gregory G. Pincus, 64; research director, Worcester Foundation for Experimental Biology, research professor of biology, Boston University, and developer of the oral contraceptive pill Enovid, and of Estrone, a hormone used in the treatment of breast cancer; 22 August.

David Potter, 73; professor emeritus of botany, Clark University; 7 August.

Walter R. Stahl, 37; scientist, department of biometrics, Oregon Regional Primate Research Center; 30 July.

Daniel E. Strain, 63; associate research manager, polyolefins division, Du Pont Company's plastic department; 2 July.

Zolton T. Wirtschafter, 67; head of research, Veterans Administration Hospital, Portland, and associate professor of medicine, University of Oregon Medical School; 18 August.