be why Heltne didn’t see any.) Nature-conscious visitors to Amazonia have always noticed the relative paucity of mammal life. It is inaccurate to blame this on exploitation by humans.

Also, I find it difficult to believe that human exploitation has had any appreciable effect on the great Amazon rain forest. First, native agricultural deforestation always covers such small areas that the natives are able to extract only marginal existence from them. Second, only a fraction of the rain forest has commercial value. With few exceptions, lumbermen cut a tree here and another there, and always near a waterway. Third, even during a brief visit to Amazonia, Heltne must have developed an awareness of the extent of the virgin forest. Hour after hour the airborne traveler observes towering green forest as far as the eye can see in every direction with no visible signs of human exploitation—or even habitation. It’s an awesome spectacle.

It will be a long, long time before man destroys the Amazon rain forest, but it is conceivable that species of animals might be eliminated from substantial portions of this earth’s largest remaining untouched area.

Groping through Spoken English

The columns of Science often contain expressions of concern about the inadequacy of the writing found in scientific papers. In this country, however, scientific communication is largely made through the spoken word in lectures and talks at meetings and symposia. The language employed for these presentations is almost invariably Ah-ah-ese. I propose a return to the use of English. This radical suggestion is prompted by my recent experience at a symposium in Paris where many papers were delivered in French. Through a fortunate circumstance in my childhood, I understand French as well as I do English. The speakers varied in eloquence, clarity, and audibility, but every talk possessed a quality of smoothness and directness whose origin I was unable at first to identify. Eventually it became trivially simple: every sound uttered by a speaker was part of a French word. What a contrast with scientific meetings in this country! I await the day when an unusually honest speaker of Ah-ah-ese will begin his talk with: “A-a-a-UMM! The ah insignificance of my ah remarks will—uh—be—ah minimized, or er—er—concealed, by the ahah braying noises I am ahahahahahahah.” The speakers in Paris convinced me that we too could speak our native tongue without groping around for every other word and moaning dismally as we search. Some of us may be too old to alter our ways. But at least we can persuade our students to cut out the noise, pronounce nothing but English words, and remain silent during the birth pangs of the next inspired phrase.

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Painfully Slow Medical Progress

Sabin’s article, “Collaboration for accelerating progress in medical research” (23 June, p. 1568), appeals strongly to this layman who has been observing painfully slow progress in one area where collaboration and coordination could yield a quick, important payoff—the area of artificial internal organs in general, and artificial kidneys in particular. Though originally a temporary expedient, the kidney machine is now the only practical means of treating chronic uremia. Its cost of $10,000 per year has been prohibitive and, despite available technology, 15 years elapsed before these costs were reduced. Now a unit designed for periodic home hemodialyses has been made available to 25 patients under an experimental program. It is expected to reduce costs by a factor of five—a result of collaboration by physicians, chemists, engineers, and others. This is a major step forward, but its use still requires extensive training of patients and family physicians. The next obvious objective is continuous dialysis with simple equipment portable on the patient, thus obviating problems of intermittent, high-volume flow adopted for emergency use. But without coordinated collaboration, guided by NIH or others, another 15 years can pass before this is achieved even though it may today be within the “state of the art.”

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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 nation 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

**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.

**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 Albany 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 Oetting, 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.