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Incorporating Science News Letter

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COVER: Population growth is finally slowing, but not entirely for the right reasons. Although birth control has been accepted more than anticipated, food shortages have finally caught up millions of people. Death rates are consequently rising in many parts of the world. The prognosis is hopeful for most, but tragically grim for some. See p. 316. (Illustration: World Population Year)

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LETTERS

Genetic erosion of germplasm

As a professional geneticist and an amateur naturalist, I was delighted to read (SN: 10/23/76, p. 266) that the recent Washington Wildlife in America Conference wisely endorsed a genetic criterion for the preservation of our nation's endangered species so that what hereditary variation remains in our vanishing fauna is not further diminished in the future.

In my opinion, it is indeed a scientific tragedy that for so many years many ecologists and wildlife specialists have neglected, to a considerable extent, in their research of endangered fauna and flora such a critical factor as genetic erosion and with it, the gradual deterioration of a species' germplasm. Unlike the proverbial hourglass that after a period of time can be turned over to begin anew, the extinction of a species—any species—is an eternal event that can happen only once.

Hopefully, all your readers are aware of a basic premise of population biology, namely, that there must be *both* ample number and variety of individuals in any population to ensure that a species will encompass, within its gene pool, a sufficient supply of hereditary characteristics to permit natural selection suitable choices for survival. The modern evolutionary emphasis is, of course, upon differential reproduction with genetic diversity the key to adaptation.

Let us never forget what Darwin referred to as "infinite variety in nature" as the crucial factor for the perpetuation and preservation of any species in its evolution.

William J. Kepler
Assistant to the Provost and
Professor of Zoology
Eastern Illinois University
Charleston, Ill.

Polio vaccine

Your description of the hearings before Sen. Edward M. Kennedy regarding polio vaccines (SN: 10/2/76, p. 213) was extremely well reported. The feeling that many of us have now is that a strategy of eradication of the polio virus itself from our nation and indeed from the world should be adopted. Clearly, the attenuated live virus is not the instrument that one would choose with this different strategy.

For the time being, I would be happy to simply see the killed virus vaccine brought back as an alternative now that parents are going to be given an opportunity to be well

informed about the small risks of live attenuated vaccine and may wish to choose the killed vaccine as an alternative. I hope that the issue about a different strategy will continue to be brought before the public in an informed and calm manner.

Robert A. Aldrich, M.D.
Professor of Preventive Medicine
and Pediatrics
University of Colorado Medical Center
Denver, Colo.

Porpoises and tuna

The writer of the news item headed "First ban on porpoise killing imposed" (SN: 10/23/76, p. 262) relied too heavily on Auggie Felando and the American Tuna Boat Association for some of the statistics and "explanations" contained in the article.

Industry sources may now claim that 60 percent of the American tuna catch was made on porpoise but they had earlier stated smaller percentages when they sought to minimize the size of the problem. The fact is that the percentage varies every year because of different fishing techniques, whether or not the yellowfin spotted are in large schools or small groups, and the relative convenience of fishing "on porpoise."

In general your article is accurate but unfortunately it helps perpetuate the "abused fisherman" image the Tunaboat Association has so successfully built up in the last few years. Yes, they have problems, but most are of their own making.

Vic Cox
President-elect
American Cetacean Society
San Pedro, Calif.

(Mr. Cox enclosed an article quoting earlier industry estimates of a 44 percent catch involving porpoises. Another reader pointed out that rather than "preying" on tuna, the relationship between porpoises and tuna is unclear.—Ed.)

Regarding "Endangered Species: When to Act" (SN: 10/23/76, p. 266), the answer of course is *now*. In case our actions are too little and too late the least we can do is start a system—perhaps dubbed Project Noah—to preserve by freezing some tissue from a male and female of each endangered species. The day may well come when cloning can be used to restore extinct species to a survival status in nature.

Donald W. Stotler
Portland, Ore.

New Directions

In response to a number of requests from readers, the address of Russell Peterson's *New Directions* organization (SN: 10/23/76, p. 267) is: 2021 L St. N.W., Suite 405, Washington, D.C. 20036.—Ed.

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