gy-intensive products such as plastics for less energy-intensive products; and inadequate research and development into such questions as how large amounts of power can be transmitted via underground lines.

Remedies, he says, would include new institutional arrangements to control utilities, such as proposed in the plant siting bill, and less-regressive rate structures to reduce economic incentives to large users of electricity (SN: 1/2/71, p. 15). A suitable revamping of the rates could accomplish this goal without lessening the total return to utilities, he said. Crawford disagreed on both points, claiming utilities are already hampered by overzealous regulation in finding efficient answers to problems and that any slowdown in the rate of growth of electric consumption "would have the most unwelcome results on America's goals. . . ."

Part of the problem is economic, of course. Freeman pointed out that utilities are the most capital-intensive industry in the nation. What he did not say was that high interest rates and a rapidly growing economy thus make utility growth almost mandatory. The differences that surfaced at the seminar may be only the beginning of growing conflicts between the environment and traditional economic practice, between ecology and rapid growth. □

ENDANGERED SPECIES

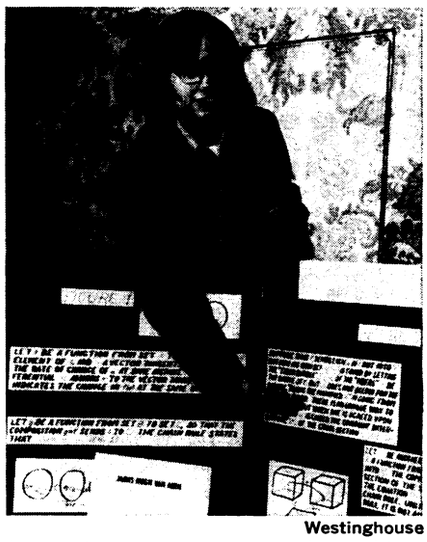
Whale protection

Whaling by the single remaining United States whaling firm, the Del-Monte Fishing Co. of San Francisco, will probably end as the result of a proposal by Commerce Secretary Maurice H. Stans this week to terminate licensing for hunting the finback, sei and sperm whales. The three were placed on the endangered species list last year. The earlier act banned the importation of the whales. This week's move was mainly in the interest of keeping United States industry consistent with the import curb. Japan, which exports about a third of its catch to the United States, was the major nation affected. The U.S.S.R. is the only other remaining whaling nation. But since it uses most of its catch domestically, only world public opinion could cause it to apply curbs, says a Commerce official.

There is an indication in a Japanese fishing journal that the Japanese whaling industry will now begin to concentrate on smaller species of whales which are not now on the endangered species list, says the official. Within a year this may cause them to be on the list, he adds. Conservationists hope such future action will be in time. □

SCHOLARSHIP WINNERS

Creative and skeptical



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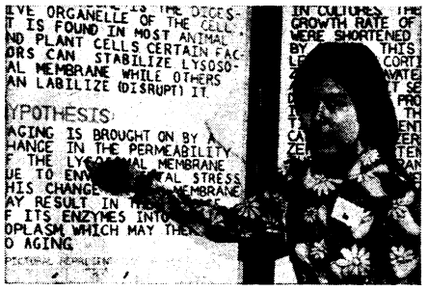

Top winners of science scholarships: (clockwise) Van Aken, Ling, Lo.

The 10 young prodigies judged as the nation's most promising scientists this week in Washington in the 30th annual Westinghouse Science Talent Search individually defy categorization. But as a group, they and the 30 other semifinalists (SN: 1/30/71, p. 81) can be characterized as "properly critical and very constructive—a combination of skepticism, ingenuity and creativity," says Dr. Edward E. David Jr., the President's Science Adviser, who met with them Monday.

James H. Van Aken of Lyons Township High School, La Grange, Ill., took home the top scholarship award of $10,000. For his entry in the national contest, he prepared a theoretical paper in the field of differential geometry dealing with so-called fiber bundles.

James traces his interest in pure mathematics to the fifth grade and a study he did in relativity. He is an active high school debater and believes that a "vigorous policy of laissez-faire" on the high school level would be the best basis for a program which enhances the basic scientific talents of today's youth. He wants to attend Harvard University.

Two other young mathematicians, four physicists, a sociologist, a palentologist and a biologist (including a brother and a sister for the first time) share the scholarship grants of $67,500.

The 10 winners were selected from 18,000 high school seniors from 49 states and the District of Columbia. They and 30 other semifinalists spent a five-day all expense-paid visit in Washington where they visited their Congressmen, scientists and exhibited their projects.

Winners of the two $8,000 scholarships were Wensor Ling, 17, and Cecilia W. Lo, 16, both of Flushing, N.Y. Wensor conducted a study in modern algebra on the properties of nonassociative mathematical structures. Cecilia's research concerned the effects of environmental stress on cells' lysosomes as a cause of aging. She used a protozoan for her study.

Samson D. Gruber of New York City, Edward J. Hoskins of Las Cruces, N.M., and Martin W. Lo, 18, brother of Cecilia, all received $6,000 awards.

Winners of the $4,000 scholarships were Warren G. Lavey of Skokie, Ill., Debra A. Meloy of Fairfax, Va., Kraig L. Derstler of Columbia, Pa., and Thomas H. Fly of Spartanburg, S.C.

Marie S. Jernazian of New York City and Mitchell L. Dong of Bergenfield, N.J., were named as alternates to the $4,000 scholarship.

All other semifinalists received cash awards of $250 each.

At a banquet honoring the young scientists, Dr. William D. McElroy, Director of the National Science Foundation, spoke of common ties between youth and science—both prize individuality, skepticism and curiosity. But he urged scientists to give more attention to the social and human impact of what they are going to do. "We must resolve any tensions between the scientific community and the larger community that supports it." A telegram of congratulation from President Nixon also was read.

The Science Talent Search is conducted annually by Science Service through its Science Clubs of America. Financing is provided by the Westinghouse Educational Foundation which is supported by Westinghouse Electric Corp. □