

and some of that showed up soon afterward in a stream.

Nine of the spills on the slopes have amounted to 500 gallons or less, and most of the spillage has been recovered. Environmental Protection Agency

officials report that petroleum companies have been quite careful in this touchy territory, but they acknowledge that such spillages even before the pipeline is built underscore the need for vigilance. □

From computer model of worms to effects of urbanization, projects of 40 Science Talent Search winners run the gamut

For 33 years, the Science Talent Search has brought the nation's most scientifically talented high-school seniors to the attention of the professional and academic community. This year's crop of 40 finalists (32 males and 8 females), announced this week, were chosen from 1,104 qualified applicants. They will be honored with an expense-paid five-day trip to Washington in March to attend the Science Talent Institute and be judged for \$67,500 in Westinghouse Science Scholarships and Awards. The top award is a \$10,000 four-year scholarship.

The entrants were selected on the quality and originality of the projects submitted, school records and faculty recommendations. Emphasis is placed on pure research. Their projects cover a wide range of science and engineering fields—biochemistry, microbiology, ecology, botany, mathematics, computer science, psychology, physics, urology, metallurgy, archaeology, aeronautical and biomedical engineering are but a few areas explored by the finalists. One contestant from Minnesota collected 30 million-year-old fossils of the extinct hoofed-animal *Merycoidodon culbertsoni* in Wyoming and developed a new technique to identify specimens, reconstruct their appearance and study their evolutions. Another entrant from Minnesota chose the fields of biochemistry and immunochemistry. He conducted a study of chemicals involved in blood coagulation and developed methods to detect two of the chemicals.

This year's Science Talent Search also generated a number of research projects in ecology and environmental sciences. A student from Colorado made a computer model of a worm and applied the characteristics of the model to conduct a population study of real worms. A student from Illinois analyzed the extent of the effects of urbanization over the last 60 years on the glacial topography of the Wheaton quadrangle in northeastern Illinois.

The finalists come from 37 schools in 31 states; 27 of the schools have never placed winners in previous years. Thirty-one of the 40 students rank in the top five percent of their classes.

The Science Talent Search is sponsored jointly by Westinghouse Electric Corp. and Science Service, publisher of SCIENCE NEWS. Science Service administers and Westinghouse

provides financial support for the searches through the Westinghouse Educational Foundation.

By state, the winners are:

ALABAMA: Glenda S. Bramlett, Falkville H.S., Falkville.

CALIFORNIA: Meika A. Fang, Alhambra H.S., Alhambra; Thomas C. Banwell, Claremont H.S., Claremont.

COLORADO: Thomas D. Schneider, Boulder H.S., Boulder.

FLORIDA: Richard A. Dargan, Melbourne H.S., Melbourne.

IDAHO: Cheryl D. Reaves, St. Maries H.S., St. Maries.

ILLINOIS: Carol J. Anderson, Wheaton North H.S., Wheaton.

LOUISIANA: Kenneth M. Eyster, Lafayette H.S., Lafayette.

MINNESOTA: Daniel Wehler, Brewster H.S., Brewster; Carl Taswell, Mayo H.S., Rochester.

NEBRASKA: John C. MacGuire, Mt. Michael Benedictine H.S., Elkhorn.

NEW JERSEY: Vicki L. Garvin, Paramus H.S., Paramus; Ho-Jin Lee, Lawrence H.S. North, Trenton.

NEW YORK: Edward H. Frank, North Sr. H.S., Great Neck; Robert W. Klein, Walt Whitman H.S., Huntington Station; Richard H. Trommer, Jamaica H.S., Jamaica; Linda C. Rabinowitz and Ignatius D. Roger, Bronx H.S. of Science, New York; Francis Barany and Eric S. Lander, Stuyvesant H.S., New York; Stuart A. Haber and Thomas G. McCabe, Martin Van Buren H.S., Queens Village.

OHIO: Linda K. Bockenstedt, Wayne H.S., Dayton; Bruce D. Lucas, Perry H.S., Massillon.

OKLAHOMA: Philip J. Carlberg, Ponca City Sr. H.S., Ponca City; Ock-Horn Lee, Thomas A. Edison H.S., Tulsa.

OREGON: Ilan M. Kroo, David Douglas H.S., Portland.

PENNSYLVANIA: Dale A. Miller, Annville-Cleona H.S., Annville; Robert A. Beckman, Springfield H.S., Erdenheim; Jordin T. Kare, Harriton H.S., Rosemont; Michael B. First, Cheltenham Twp. Sr. H.S., Wyncote.

RHODE ISLAND: Michael D. Ashworth, Toll Gate H.S., Warwick.

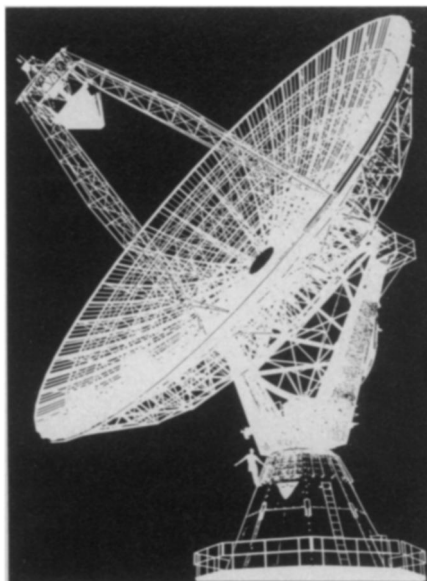
TENNESSEE: Danny L. Turner, Waverly Central H. S., Waverly.

TEXAS: Mark A. Schumacher, Hillcrest H.S., Dallas; Gregory M. Senofsky, Lamar H.S., Houston; Milinda R. Carson, Sharpstown Sr. H.S., Houston.

VIRGINIA: Frank T. Leighton, Washington-Lee H.S., Arlington; Mark D. Barton, Herndon H.S., Herndon.

WISCONSIN: Walter A. Getzel, Brookfield Central H.S., Brookfield.

WYOMING: Emmett Evanoff, Cheyenne Central H.S., Cheyenne.



Collection Reflection Focus

Science News is the weekly survey of what's happening in science.

Selected Evaluated Concentrated

16 pages a week makes it the quick way to be informed.

Send for your own subscription now.

Science News
231 W. Center St.
Marion, Ohio 43302

Please start my one year subscription.

I enclose \$10 Bill me

Name

Address

City State Zip SO14