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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Insecticide by Air

See Page 98

A SCIENCE SERVICE PUBLICATION

October 1962

SCIENCE YOUTH MONTH

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
PLAN YOUR ACTION PROGRAM NOW!	1	2	3	4	5	6
	Science Service has organized, for the seventh year, National Science Youth Month, enlisting cooperation from 48 national agencies. • Organize a local National Science Youth Month Committee to plan a full-scale program in YOUR community. • Get information to all interested organizations and individuals. • Prepare releases for newspapers, radio, and television.					
7	8	9	10	11	12	13
Help your school schedule an October PTA meeting devoted to science youth activities. Ask all professional and technical societies to devote an October meeting to science youth activities. • Plan scientific tours for the coming year in cooperation with plant officials and school administrators. • See that your science club is affiliated with Science Clubs of America, at no cost, so that you can get the Sponsor Handbook.						
14	15	16	17	18	19	20
Reactivate your science fair committees and start planning for next spring. If you have not had a science fair, organize one now. • Get cooperation from colleges, industry, professional societies, service clubs, newspapers, and others. Set up a workshop clinic for teachers, students, and other interested individuals to swap ideas for getting science projects started. • Let the public know what you are doing.						
21	22	23	24	25	26	27
Ask for Science Talent Search examinations for your most promising seniors. • Have a project night. • Invite professional scientists, engineers, to a mass meeting of young scientists. • Get eager beginners and "old pro's" working together. • Organize a special Science Youth Month assembly in your school. • Hold science club "career sessions." • Ask local area scientists and engineers to tell your members about opportunities, needs, qualifications for science careers. • Obtain science career guidance literature.						
28	29	30	31	SCIENCE YOUTH MONTH TURNS THE SPOTLIGHT ON YOUTHS WHO MAKE UP THE NATION'S VAST RESERVOIR OF POTENTIAL SCIENCE TALENT. TODAY'S YOUTH ARE THE SCIENTISTS OF TOMORROW.		
Subscribe to magazines and journals covering science and mathematics. Enter or renew memberships in professional societies. • Send a report on YOUR Science Youth Month observances to Science Clubs of America, so they can be passed on to others.						

Cooperating in National Science Youth Month:

American Association for the Advancement of Science

AAAS administers a School Science Library Program sponsored by the National Science Foundation. The objectives are to develop an interest on the part of students in reading science and mathematics books that broaden their perspective to stimulate the choice of a career in science, to encourage teachers to enliven their instruction with collateral reading assignments, and to facilitate selection of science books for

school and public libraries. Publications available are: *The Traveling Elementary School Science Library* (25¢); *An Inexpensive Science Library* (25¢); *The AAAS Science Book List*, 1959 (new edition available 1963), (\$1); *The Science Book List for Children*, 1960 (\$1); and *Careers in Science* (15¢). Address Dr. H. J. Deason, Dir., Science Library Program, AAAS, *Science Education News*, reports education activities of scientific societies. Junior Academies of Science are encouraged through AAAS-affiliated Academies of Science. A junior Scientists' Assembly is sponsored at an annual meeting by the Academy Conference. Grants are given for student projects through the Senior Academies.

AAAS has appointed a Commission of Science Instruction in the Elementary and Junior High Schools, supported by the National Science Foundation, which will be concerned with the preparation of course content materials for pre-high school years. Address Dr. John Mayor, Dir. of Educ., AAAS, 1515 Massachusetts Ave., N.W., Washington 5, D. C.

American Cancer Society

The American Cancer Society endeavors to stimulate student interest in science studies and careers. In cooperation chiefly with senior high schools, colleges and community resources, the

Society is carrying out an active career-incentive program. It helps conduct and support science fairs, provide medical and research speakers, facilitate student visits to hospitals and research centers—and in other ways seeks to aid student interest. Certain divisions have provided training grants for careers in medical technology and granted other scholarships related to careers training. Free teaching aids and informational materials on cancer to science teachers and information to students are provided on request to local units of the Society.

American Chemical Society

Members volunteer to give personal assistance to high school science teachers. ACS presents four awards at the National Science Fair-International and many local sections sponsor award programs. The activities of the ACS Division of Chemical Education include a standardized test program and publication of the *Journal of Chemical Education*. The ACS initiates conferences and institutes in chemistry. Over 160 local sections are active in various educational activities. More than 370 student affiliated chapters in colleges and universities actively engage in programs designed to better prepare students for careers in chemistry. For information consult local section officers or American Chemical Society, 1155 16th St., N.W., Washington 6, D. C.

American Dental Association

All state and local dental societies are being urged to participate in science fair activities. Dental societies and dental schools are prepared to offer advice and material assistance to science teachers and students. The ADA presents awards for outstanding exhibits at the National Science Fair-International. A booklet, *Dental Projects for High School Science Students*, is available without charge from many local dental societies; single copies from Science Service (25¢ for single copy; 20¢ each for 10 or more). Dental health and hygiene information described in the Catalog of the ADA (single copy on request) provides some additional background material for science projects. For information and names of local dental society officers, write to Dr. Sholom Pearlman, American Dental Association, 222 E. Superior St., Chicago 11, Ill.

American Federation of Labor and Congress of Industrial Organizations

AFL-CIO supports better schools and encourages scientific education. Many of its affiliated unions conduct apprenticeship schools to transmit skills to young apprentices and the latest scientific processes to journeymen members. Central labor organizations and local unions of skilled workmen in almost every community stand ready to help pupils with their science projects, clubs and fairs. Students wanting assistance are invited to contact the local union bodies in their home towns or write AFL-CIO Coordinator of State and Local Councils, 815 16th St., N.W., Washington 6, D. C.

American Heart Association, Inc.

AHA through its affiliates and chapters operates extensively with science fairs and other school-related science activities. The AHA and many of its affiliates and chapters have health career committees which plan and conduct specific youth activities such as field trips, seminars, student research and work experience. For program information and educational materials, contact your local heart association.

American Institute of Biological Sciences

Among AIBS educational activities are the Biological Sciences Curriculum Study (BSCS), directed at the secondary level. Three approaches using the fundamental concepts and modern trends are being used experimentally. The Visiting Biologist Program for High Schools is supported by the National Science Foundation and administered by AIBS. The Secondary School Biological Sciences Film Series is directed primarily at the 10th grade level and consists of 120 lecture-demonstration 30-min. films each correlated with teachers' manuals

and study guides. Selected winners of the National Science Fair-International are guests and display their exhibits at the AIBS Annual Meeting. Write: Educational Activities, The American Institute of Biological Sciences, 2000 P St., N.W., Washington, D. C.

American Medical Association

County and state medical societies cooperate with local science fairs by joining in sponsoring committees, giving special awards and scholarships, arranging counseling, etc. The AMA presents citations at the annual National Science Fair-International and selected winners are guests at the AMA annual meeting. A 25-min. color, sound motion picture—*I am a Doctor*; a large-scale exhibit on Medicine as a Career; descriptive literature on the study of medicine, scholarship information and school guidance program suggestions are available from the AMA via local medical societies. Write: Norman H. Budde, American Medical Association, 535 N. Dearborn St., Chicago 10, Ill.

American Pharmaceutical Association

Through the efforts of the National Advisory Commission on Careers in Pharmacy, which is comprised of representatives of every national organization in the profession, practicing pharmacists are being urged to assist students and their science teachers in the development of science projects. The Commission is coordinated by the APhA, which presents two awards at the National Science Fair-International. A career brochure, *See Your Future in Pharmacy*, two color sound films (one for junior high school age and one for senior high and adults), about the profession of pharmacy are available and a 20-foot Career Exhibit may be rented from the APhA. Address: George B. Griffenhagen, American Pharmaceutical Association, 2215 Constitution Ave., N.W., Washington 7, D. C.

American Society for Metals

ASM publishes periodical and technical books, and distributes information on metals, issues home study courses, presents technical meetings and exhibitions. Local chapters provide young engineers meetings, cooperate with schools and libraries in attracting youth to engineering. ASM sponsors a young engineers day during its annual National Metals Exposition. Scholarships are provided through colleges having metallurgical courses. ASM has cooperated in FSA Awards, a metal science kit, and in the establishment of BSA Explorer Posts in metals. ASM will present awards at the National Science Fair-International. Contact: Allen Ray Putnam, American Society for Metals, Metals Park, Ohio.

American Society for Microbiology

Local Branches of the ASM have committees which provide speakers on microbiological topics and give aid to biology students and teachers. ASM issues citations to students and their sponsors, who win awards for microbiology exhibits at science fairs. Certain Local Branches give additional awards. ASM sponsors awards at the National Science Fair-International. Suggestions for experiments, projects, film lists, references, other teaching aid materials and a career brochure are available free to teachers. A list of universities offering degree programs in microbiology is available at 50¢. Address: American Society for Microbiology, 115 Huron View Blvd., Ann Arbor, Mich. A movie, "A Career in Bacteriology," may be rented or purchased from Audio-Visual Center, Indiana University, Bloomington, and other sources.

American Veterinary Medical Association

Veterinary associations are being encouraged to assist students in the development of proper scientific attitudes and techniques. Aid to science fair personnel through these associations and their Women's Auxiliaries is being developed. A booklet, *Veterinary Medicine as a Career* (single copies free, additional copies 10¢ each), and a list of veterinary medical organizations to contact for direct assistance are available. AVMA presents awards at the National Science

Fair-International; top winner is guest at the AVMA annual meeting. Address: Heinz R. Kuehn, Dir., Public Information, 600 S. Michigan Ave., Chicago 5, Ill.

B'nai B'rith Women

B'nai B'rith Women participates with and contributes to three major youth services: B'nai B'rith Youth Organizations, Hillel Foundations and Vocational Service. Direction of young people is carried on by trained personnel. Supervised leisure activities enable youth to explore and express interests and learn skills, while developing healthy patterns of human relationships and fulfillment of responsibilities. Clinics are conducted to provide guidance in the selection of careers. Write: B'nai B'rith Women, 1640 Rhode Island Ave., Washington 6, D. C.

Chamber of Commerce of the United States

Over 2000 Chambers of Commerce have Committees on Education alerted to manpower problems and to the need for career planning. Many chambers cooperate with school officials in planning and conducting "Career Conferences for Teen-Agers" in which students have the opportunity to learn trends in local manpower needs and training required. Business and professional men in every community are ready to work with teachers and administrators to improve guidance programs, to develop science fairs or to secure materials, equipment or work experience to make science teaching more effective. For information consult your local Chamber of Commerce or write: Education Dept., U. S. Chamber of Commerce, 1615 H St., N.W., Washington 6, D. C.

Cooperative Extension Service

4-H Club work, the youth phase of the Cooperative Extension Service of the U. S. Department of Agriculture in cooperation with the Land Grant College or University in each state, provides a program of youth development based on the scientific approach to problem solving. This is supported by extension specialists representing various divisions of each college or university. Scientific approach to agriculture, home economics and youth development has always been an important segment of 4-H Club work. It is increasingly imperative that materials relating to science be provided to the volunteer local leader who works directly with 4-H members in 50 States, Puerto Rico and 70 foreign countries. A national study of science in 4-H is underway to provide opportunity for new depth in 4-H development programming. Information from the 4-H Division, Federal Extension Service, USDA, Washington 25, D. C., the Land Grant College or University of each State or local county extension office.

Engineering and Science Organizations

Each field of engineering has its own professional society and some of these, including the so-called founder societies, are represented by the Engineers Joint Council, 29 W. 39th St., New York, N. Y. Problems of education, personnel, training and utilization are the concern of the Engineering Manpower Commission at the same address, while Scientific Manpower Commission, 1507 M St., N.W., Washington 5, D. C., performs the same function for scientific organizations. Teachers and others may make inquiries on special problems in connection with science, technology and careers. The Scientific Manpower Commission may be consulted on Selective Service and other military problems.

Entomological Society of America

ESA is a professional society for entomologists and those with related interests. The membership is principally North American but other countries are represented. The Society publishes the following: *Annals of the Entomological Society of America*, *Bulletin of the Entomological Society of America*, *Journal of Economic Entomology*, *Miscellaneous Publications of the Entomological Society of America*, *Entoma*. The national headquarters building is

at 4603 Calvert Rd., College Park, Md. The 1962 President is Robert Glen, Asst. Deputy Minister (Research), Dept. of Agriculture, Central Experimental Farm, Ottawa, Ontario, Canada. Mail may be addressed to the Executive Secretary at the College Park headquarters.

Industry Aids to Education, Inc.

IAE has been organized to provide means through which industry, professional societies and schools may work together. IAE is developing this link in the sciences and math at the secondary and elementary level on the basis that industry has, through knowledge, experience and resources, the tools to help meet many of the schools' needs. IAE has information on industry's resources throughout New England and source material valuable to teachers. Write: Robert M. Burnett, Industry Aids to Education, Inc., 18 Tremont St., Boston 8, Mass.

Junior Engineering Technical Society

Program designed to stimulate and encourage interest in engineering, applied science and mathematics among high school students. JETS chapters are sponsored by local industry and/or professional groups throughout the U. S. and 11 foreign countries. JETS provides materials for initiating and operating the chapters. The program includes a National Project Exposition and Conference. JETS offers students an opportunity to explore various technical fields and to compare attitudes, interests and abilities with requirements of technical professions through actual experiences and contacts. Write: JETS, 345 E. 47th St., New York 17, N. Y.

Junior Science and Humanities Symposia

The U. S. Army in cooperation with universities, educational and civic organizations sponsors a series of Junior Science and Humanities Symposia designed to seek out, motivate and stimulate talented youth toward careers in science and provide a measure of recognition for outstanding students and teachers. Each two or three days symposium is conducted in a research environment. The program consists of presentations of research papers by high school students, presentations by eminent research directors, discussions on career and technical matters with scientists, and witnessing research in progress. For information write: Director, JSHS Program, U. S. Army Research Office, Box CM, Duke Station, Durham, N. C.

Manufacturing Chemists' Association, Inc.

MCA, representing the chemical manufacturing industry, executes an aid-to-education program from kindergarten to college. Request free copy: *An Industry Helps Our Schools*. Holt, Rinehart and Winston, 383 Madison Ave., New York 17, N. Y., distributes *Scientific Experiments in Chemistry* (for senior highs), *Superstition to Supersonics* (for junior highs), and *Matter, Energy and Change* (for elementary supervisors and teachers). For MCA's chemistry films information write Southernland Educational Films, Inc., 201 N. Occidental Blvd., Los Angeles 26, Calif. Free publications: *Guide to Aid-to-Education Materials Available from the Chemical Industry*; *Frontiersmen of the Future*, a careers handbook; *Source of Information on Careers in the Scientific Fields*; *Film Guide on Chemicals, Chemistry and the Chemical Industry*. *Chemical Industry Facts Book*, single copies, 40¢ to educators. Address: Manufacturing Chemists' Association, 1825 Connecticut Ave., N.W., Washington 9, D. C.

National Aeronautics and Space Administration

NASA has organized the Office of Educational Programs and Services (OEPS) to inform educators, students and the public. OEPS programs encompass the development, production and distribution of publications, reports, exhibits, historical documents, motion pictures and other visual aids. Included are services to educational and commercial television networks, curriculum planners of elementary and secondary schools, colleges, and professional educa-

tional organizations, which activities involve personal consultative services of NASA educational specialists and technical and scientific help and advice of NASA experts in fields of space science and technology. Address: Office of Educational Programs and Services, National Aeronautics and Space Administration, 400 Maryland Ave., S.W., Washington 25, D. C.

National Aerospace Education Council

(formerly National Aviation Education Council)
To help teachers in science or mathematics, NAEC publishes a *Teaching Guide for the Earth and Space Science Course* (\$1). *The Arithmetic of Flying* (50¢) more than 250 arithmetic problems pilots solve to fly safely; *1962 U. S. Aircraft, Missiles, and Spacecraft* (\$1.50) describes products of the U. S. aerospace industry; *The Space Frontier* (50¢), a log of satellites and space probes and a glossary of astronautics terms; and *Aerospace Highlights* (50¢), unusual facts about aviation and space. To provide continuing aviation and space information to schools, libraries and individuals, NAEC offers a mailing service (\$5 a year). Address: National Aerospace Education Council, 1025 Connecticut Ave., N.W., Washington 6, D. C.

National Association of Manufacturers

By encouraging study of science and mathematics in schools, cooperation with local and regional science fairs and the National Science Fair-International, the NAM Education Department and Committee on Research is promoting development of science talent. Booklets, *Industrial Research and Development* and *The Growth of American Industry*, have been distributed. Copies free on request. Address: Education Dept., National Association of Manufacturers, 2 East 48th St., New York 17, N. Y.

National Committee for Careers in Medical Technology

In cooperation with the Intersociety Committee on Pathology Information, NCCMT supplies certificates for local and state medical technologist and pathologist societies to award at local science fairs. Summer jobs in hospital pathology laboratories often accompany local awards. A summer job with the American Registry of Pathology at the Armed Forces Institute of Pathology plus travel expenses is given as an award for a pathology-medical technology project at the National Science Fair-International. The committee distributes career information on medical technology. NCCMT is sponsored by the American Society of Clinical Pathologists, the American Society of Medical Technologists and the College of American Pathologists. Address: National Committee for Careers in Medical Technology, 1785 Massachusetts Ave., N.W., Washington 6, D. C.

National Merit Scholarships

National Merit Scholarships are four-year college scholarships available to high school seniors. Stipends are based on need and vary from \$100 to \$1500 per year. Winners choose colleges and curricula during the competition. Last year 1,050 Merit Scholarships were awarded, including 625 Merit Scholarships offered by and named for 150 business organizations. Each principal is sent registration materials in September. The following Spring, the National Merit Qualifying Test is administered to second semester juniors and first semester seniors. Participating students pay a \$1 testing fee. The 1963-64 competitions begin with the Qualifying Test in March 1963. Winners will be announced in the Spring of 1964. See your principal or write: National Merit Scholarship Corporation, 1580 Sherman Ave., Evanston, Ill.

National Safety Council

NSC, organizing framework of the safety movement in America, is a voluntary non-commercial, nonprofit membership association. Its sole purpose is to reduce the number and severity of accidents and serves as a national and international clearing house to gather and

distribute safety information. Through its national headquarters, regional offices, state and local affiliated units, it stimulates continuous and coordinated accident prevention programs. In cooperation with other organizations, it stimulates interest in safety in all fields. For information on materials and other services for science clubs write: Youth Activities Dept., National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill.

National Pest Control Association

NPCA is expanding its program of aid to science fairs and other local programs designed to encourage science study. Through individual members and cooperating state associations, NPCA seeks to make information available on general biology, entomology and economic entomology. NPCA distributes *Careers in Entomology*, in cooperation with the Entomological Society of America, and *Career Opportunities in the Pest Control Industry*. Write: National Pest Control Ass'n., 250 W. Jersey St., Elizabeth, N. J.

National Science Foundation

This Federal Government agency conducts programs of support and stimulation to science and research, including scientific personnel and education. Most of its operations are through grants that facilitate activities by other organizations. Programs in science education include support of institutes, research participation and summer fellowships, and other training programs for high school and college teachers of science and mathematics; research participation and independent study for college undergraduates; limited summer programs for high school students of science and mathematics; traveling science libraries; fellowships for graduate students and advanced scholars in science, mathematics and engineering; and projects for the improvement of course-content materials and the development of new teaching and learning aids in science and mathematics. For information write for National Science Foundation Programs for Education in the Sciences, National Science Foundation, Washington 25, D. C.

National Science Teachers Association

NSTA is a Department of NEA, an affiliate of AAAS. Membership (\$6.00) provides: 8 issues of *The Science Teacher*, 8 issues of the *Elementary School Science Bulletin*, and the packet service. Several publications for students and teachers are available. Activities include the Annual Convention, nine regional meetings and maintaining national registry of science and mathematics teachers. Future Scientists of America club program includes: *Sponsor's Guide Book*, *Centrifuge Newsletter*, Charter Plaques and other free and low cost services and materials. The Ford-Future Scientists of America awards for science students offer 720 plaques (7-12 graders), 48 \$100 scholarships (9-12 graders), 16 \$300 scholarships (11-12 graders), and several \$200 scholarships as awards for reports of research-type investigation. Write: National Science Teachers Association, 1201 Sixteenth St., N.W., Washington 6, D. C.

National Telemetering Conference

NTC will award to the National Science Fair-International finalist with the best exhibit in a field directly applicable to telemetering, a certificate and expense-paid trip to attend and exhibit at the annual NTC. The sponsor of the award recipient also will be awarded this trip.

National Youth Conference on the Atom

Approximately 60 investor-owned electric utility companies are sponsoring outstanding high school science students and teachers to the 1962 National Youth Conference on the Atom, November 8-10, Sheraton-Chicago Hotel, Chicago. The purpose is to present to a group of the nation's most able science students and teachers an authoritative and inspiring picture of the peaceful atom in its various applications and to help advance interest in the study of science. Delegates will tour Argonne National

Laboratory and the Museum of Science and Industry. Co-sponsored by the National Science Teachers Association, the conference has the support of other scientific and academic organizations. Selection of delegates is carried out locally by education authorities working with electric companies. Students are chosen on the basis of scientific interest and achievement. Contact local electric company or write: T. R. Jordan, Electric Companies Public Information Program, Bozell & Jacobs, Inc., 230 Park Ave., New York 17, N. Y.

Oak Ridge Institute of Nuclear Studies

ORINS is a nonprofit educational corporation of southern universities, operated under contract to the U.S. Atomic Energy Commission. Its programs are designed to further the cause of science and science education from the pre-college through the postdoctoral levels. Its activities include a program to train secondary science teachers to become either "traveling teachers" or specialist in their own systems; administration of graduate fellowship programs, traveling atomic energy exhibits, student tours of nuclear facilities and a college student training program; special courses for high school and college teachers, symposia and conferences; maintenance of a museum of atomic energy and provision of a mobile radioisotopes laboratory for on-campus college training. Address: Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.

Optical Society of America

OSA has an active career-incentive program. A booklet, *Careers in Optics*, is being prepared. OSA sections welcome young scientists to their meetings (contact your local section for a program). OSA student memberships, available at \$2 a year, give students the right to attend OSA meetings and receive OSA publications. OSA again expects to present two awards at the National Science Fair-International of \$100 and \$75, for books and materials to enable the student to continue his studies in optics. For information about careers in optics, speakers and information about local OSA sections, write: Executive Secretary, Optical Society of America, 1155 16th St., N.W., Washington 6, D. C.

Science Service

Adult sponsors are invited to affiliate their groups with Science Clubs of America and receive the free SCA Sponsor Handbook and other aids. Science Talent Search, conducted by Science Clubs of America and sponsored by Westinghouse Educational Foundation, is open to high school seniors. Teachers should request examinations about October 15. Affiliated regional science fairs send their top two finalists to the National Science Fair-International to be held in Albuquerque, N. Mex., in May 1963. A news service for newspapers is operated. Science News Letter, a weekly summary of current science (\$5.50 per year), is published. THINGS of science, monthly experimental kits (\$5 per year), are produced. A number of books valuable in science youth work have been published. For information write Science Service, 1719 N Street, N. W., Washington 6, D. C.

Scientific Apparatus Makers Association

SAMA represents some of the nation's principal manufacturers and dealers in scientific laboratory and equipment industry. Leaflets and reprints available without charge: *A Guide to Evaluating Your Science Facilities, Your Career with the Instrument and Control Industry by the Recorder-Controller Section, I am the Science Teacher, SAMA Motion Picture Film Directory, Chart—Suggested Built-In Instruments and Equipment for Laboratory Furniture*. Write: Scientific Apparatus Makers Association, 20 N. Wacker Dr., Chicago 6, Ill.

Society of Women Engineers

Objectives of The Society of Women Engineers are exclusively educational. To further this edu-

cational purpose, SWE endeavors to inform the public of the qualifications, abilities and achievements of women engineers to bring about better utilization of engineering talent for the economic and social benefit of humanity and encourages young women with suitable aptitudes and interest to enter engineering profession and guides them in educational programs.

The National Foundation

The National Foundation's Health Scholarship program helps students interested in careers in nursing, occupational therapy, physical therapy, medical social work and medicine, thereby helping to alleviate shortages. Approximately 500 Health Scholarships, four-year awards, are offered to high school seniors and college undergraduates. They pay \$500 a year, renewable annually, for a total of \$2,000 and are apportioned geographically according to population in each of the 50 states, District of Columbia, Puerto Rico, Virgin Islands and Canal Zone. The sole obligation of each recipient is to have the serious intention of completing his education in the profession of his choice and of serving as a member of that profession. Write: The National Foundation Health Scholarships, 800 Second Ave., New York 17, N. Y.

Thomas Alva Edison Foundation

The Edison Foundation conducts a public information program for improving quality and quantity of science education and encouragement of boys and girls to undertake scientific and engineering careers. Science Youth Day, held annually on Thomas Alva Edison's birthday, February 11, is a nationwide program to interest young people in science and engineering. Science experiment booklets and free materials are distributed. Student visits to industrial plants, research and development laboratories are arranged. The Foundation organizes national conferences and Edison Institutes on scientific manpower and science education. Awards are given in the mass media to encourage better program material in sciences. A list of publications is available. Write: Thomas Alva Edison Foundation, Inc., 8 W. 40th St., New York 18, N. Y.

U. S. Atomic Energy Commission

AEC has several programs for encouraging interest in and providing information about atomic energy. Special training programs sponsored by AEC are conducted by the Oak Ridge Institute of Nuclear Studies. AEC selects ten exhibits at the National Science Fair-International for special awards providing a science work-week at an AEC national laboratory for the 10 students and their teachers. For information on the many aspects of nuclear science, write: Division of Technical Information Extension, Educational Materials Section, P. O. Box 62, Oak Ridge, Tenn.

U. S. Forest Service

Through its Conservation Education Branch the Forest Service, U. S. Department of Agriculture, assists teachers in the development of conservation materials in the curriculum. Forest Service provides teaching materials, charts and posters. Its personnel serve as resource specialists in school programs. Several publications serve to inspire and inform youth of career opportunities. Special ideas have been outlined for science fair projects. Write: Conservation Education Branch, Forest Service, U. S. Department of Agriculture, Washington 25, D. C.

U. S. Geological Survey

The U. S. Geological Survey has prepared *Project Ideas in the Earth Science*, a pamphlet describing 20 projects, for free distribution to teachers and students. Write to nearest U. S. Geological Survey Office: 503 Cordova Bldg., Anchorage, Alaska; 232 Appraisers Bldg., San Francisco, Calif.; 1031 Bartlett Bldg., Los Angeles, Calif.; 468 New Customhouse, Denver, Colo.; 602 Thomas Bldg., Dallas, Tex.; 504 Federal Bldg., Salt Lake City, Utah; South 157

Howard St., Spokane, Wash.; or to the Director, Washington 25, D. C.

U. S. Office of Education

Activities of the Science Specialists of the Division of Elementary and Secondary Education include research, publication, and consultation services to improve quality of science instruction. Science Teaching Exploring for Excellence Program (STEPS program), a "bootstrap" operation in some 20 pilot project areas in different parts of the country, falls in the latter category. Key to the STEPS program is local initiative. In a pilot project an effort is made to draw upon all resources available for science teaching improvement. New curriculum materials, equipment and facilities purchased under the National Defense Education Act, science institute returnees, and college and industrial scientists are all among the many resources which might be tapped. State science supervisors and U. S. Office of Education personnel will provide consultant help when requested, but a STEPS project remains a local effort. What is a STEPS project? It may be a single high school and its feeder elementary schools, a city or county school system, or it may consist of the schools of several counties. For information write for *Science Teaching Exploring for Excellence Program STEPS*. Publications Service, U. S. Office of Education, Washington 25, D. C.

U. S. Soil Conservation Service

The Soil Conservation Service, U. S. Department of Agriculture, furnishes technical assistance to establish soil and water conservation programs and practices. Publications: *That Land Down There*—AB 255, *Soil Conservation At Home*—AB 244, *Outdoor Recreation in Small Watershed Projects*—PA 500, *Careers in Soil Conservation Service*—Misc. Pub. 717, *Teaching Soil and Water Conservation*—PA 341 and others are available to teachers, librarians and leaders. Contact: Local and state SCS offices.

U. S. Department of Defense

The Department of Defense, including the Military Departments, cooperates with individuals and groups in providing guidance and assistance on projects which are designed to stimulate interest in scientific pursuits. This includes speakers' programs, films, furnishing of instructional and informational materials, demonstrations, exhibits and displays of military products, installation tours and briefings, and assistance in certain forms of scientific experimentation. Address: Commanding Officers of local military installations.

U. S. Air Force

The U. S. Air Force again will provide trip awards to its research laboratories for National Science Fair-International finalists in nine Air Force-orientated areas. The Aerospace Education Foundation also will recognize these nine finalists. The Air Force will continue recognition at the regional fairs in fields of Aerospace Sciences.

U. S. Army

The Department of the Army plans to expand its participation in the National Science Fair program. Trip awards were presented to 16 NSF-I finalists and summer jobs offered to 3 finalists. It is envisioned to have army judges make awards at regional fairs and greater emphasis on offering summer employment.

U. S. Navy

The U. S. Navy requests each fair affiliated with the National Science Fair-International to select one male high school sophomore, junior or senior for the best Navy-oriented project. District Commandants have been requested to contact Fair Directors and offer helpful assistance. One boy from each fair is invited for a week as a Navy Science Cruiser. The U. S. Navy will honor 10 at the 14th NSF-I.