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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE



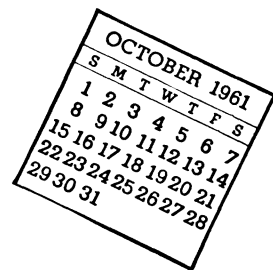
Foraging Honeybee

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A SCIENCE SERVICE PUBLICATION

October

SCIENCE YOUTH MONTH



America must have qualified scientific and technological manpower and brainpower. National Science Youth Month turns the spotlight on career opportunities for the youths who make up the nation's vast reservoir of potential talent.

Millions of young people in schools, science clubs, and science fairs across the nation form the core of this month-long emphasis on science activities.

✓ Check YOUR Action Program . . . NOW

NOW . . . Organize a **local National Science Youth Month Committee** to plan a full-scale program for making the month a rousing success in YOUR community.

NOW . . . Get **information material** ready for October use. Prepare announcements and news releases for newspapers, radio, television. See that the information gets to ALL interested organizations and individuals—schools, teachers, industries, colleges, scientists, engineers.

NOW . . . Help your school schedule an October **Parent Teachers' Association meeting** devoted to science youth activities—science clubs, science fairs, projects, hobbies, etc.

NOW . . . Ask all professional and technical societies to devote **one October meeting** to science youth power.

NOW . . . Stock your career guidance shelf with **up-to-date literature** on career opportunities in science, mathematics, engineering.

NOW . . . **Subscribe** to magazines and journals covering science and mathematics. **Enter or renew** memberships in professional societies.

NOW . . . Organize **plant tours** for

the coming school year. Check with plant officials and school administrators so that convenient times can be arranged for everyone concerned.

SEPT. 15 . . . Teachers in secondary schools—get your science group, club or class **affiliated** with **Science Clubs of America**. It's simple. Just write Science Service—"Affiliate our club." You get a valuable free sponsor handbook.

OCT. 1 . . . Urge **newspapers, radio-TV outlets** to stress science news, play up science youth power, during NATIONAL SCIENCE YOUTH MONTH.

OCT. 1 . . . **Reorganize for science fairs** slated for next spring. Reactivate your committees and start planning. If you have not had a fair, organize one. Get cooperation from colleges, industries, medical societies, service clubs, newspapers, others.

OCT. 15 . . . Ask for **Science Talent Search examinations** for your most promising seniors. Examinations will be mailed November 15.

DURING OCTOBER . . . Hold science club "**career sessions.**" Ask local or area scientists and engineers to tell your members about opportunities, needs, qualifications, for science careers.

DURING OCTOBER . . . Set up a **workshop clinic** for teachers, students, others interested. Swap ideas on getting

projects started, working with students on their individual projects.

DURING OCTOBER . . . Have a **Project Night**. Invite professional scientists, engineers, to a mass meeting of young scientists. Get the eager beginners and the "old pro's" working together.

DURING OCTOBER . . . Sell your school on a **special assembly** geared to NATIONAL SCIENCE YOUTH MONTH, with speakers from science fair organizations, proclamations and messages from local, state, national officials.

NOW AND ALWAYS . . . **Let people know what you are doing.** School papers, local dailies and weeklies, radio-TV stations, all **want** news; when an event is newsworthy, see that they get an account of it. And send your ideas to Science Service, 1719 N Street, N.W., Washington 6, D.C., so they can be passed on to others.

Listed below are the organizations that have joined with Science Service to organize this national emphasis on science youth power. The National Science Youth Program of Science Service, including NATIONAL SCIENCE YOUTH MONTH, is partially supported by a grant from the National Science Foundation.

SCIENCE PAVES PATHS TO PEACE. TODAY'S YOUTHS ARE TOMORROW'S SCIENTISTS

Cooperating in National Science Youth Month:

American Association for the Advancement of Science

The AAAS administers a Traveling High School Science Library Program and a Traveling Elementary School Science Library Program, sponsored by the National Science Foundation, to stimulate interest in and choice of careers in science and to assist in improving school instruction in the sciences and mathematics. These libraries are on loan in 1961-62 to approximately 1,000 high schools and preparatory schools, 800 elementary schools and 75 public

libraries. Address Dr. H. J. Deason, AAAS. Annotated catalogs of the traveling libraries are available at 25c each. Also available are an annotated list of paperbound science books (25c); and a comprehensive list of science books recommended for high school and public libraries; one for elementary school libraries (\$1). Send orders to AAAS Publications. Under a grant from the Carnegie Corporation of New York, the Science Teaching Improvement Program of AAAS is sponsoring a project on Studies in Teacher Education with the cooperation of Bucknell University, Emory University, Hunter College, Oklahoma State University, San Francisco State College, University of Arizona, University

of Delaware, University of Hawaii, and University of Tennessee. During the past 2 years small research grants have been made available to staff members in small colleges. A requirement of the research project is that it involve preservice science teachers. A quarterly newsletter, called *Science Education News*, reports education activities of scientific societies. Junior Academies of Science are encouraged through AAAS-affiliated State and City Academies of Science. A Junior Scientists' Assembly is sponsored each year at the annual meeting by the Academy Conference. Grants are given for student projects through the Senior Academies. AAAS, 1515 Massachusetts Ave., N.W., Washington 5, D. C.

American Cancer Society

The ACS is carrying out an active career-incentive program. A number of ACS Divisions have provided special training grants for careers in medical technology, and have granted other types of scholarships relating to career training in some instances. ACS provides free teaching aids and informational materials on cancer to science teachers and information to students upon request to the local units of the Society.

American Chemical Society

ACS 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 ACS Division of Chemical Education constructs, standardizes and distributes tests in high school chemistry and various fields of college chemistry. The Division also publishes the *Journal of Chemical Education* which is a monthly journal of great value to students, teachers and scientists. The ACS initiates conferences and institutes in chemistry. Over 160 local sections are active in educational activities of various kinds. More than 370 student affiliated chapters in colleges and universities actively engage in programs designed to better prepare students for careers in chemistry. For further information about careers in chemistry, summer employment, speakers, consultants, etc., consult local section officers or the National Office—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 (25c for single copy; 20c 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

The 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

The AHA is encouraging its affiliates and chapters to cooperate with local, regional and state science fairs. For educational materials relating to heart and blood circulation, fair directors should contact their local Heart Associations.

The American Institute of Biological Sciences

The AIBS has several educational activities of interest to high school teachers. The Biological Sciences Curriculum Study (BSCS) is being directed at the secondary level but will eventually include elementary and college levels. 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. Prominent biologists visit schools from one to three days. The Secondary Biological Sciences Film Series is directed primarily at the 10th grade level and will consist of 120 lecture-demonstration 30-min. films each correlated with teachers' manuals and study guides. Films are to be available singly, in combination, or as a set. 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 and school guidance program suggestions are available from the AMA via local medical societies. For information write to Leo E. Brown, 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 Microbiology

Many Local Branches of the ASM have committees which provide speakers on microbiological topics and give aid to biology students and teachers. ASM Committee on Education issues certificates of commendation to students, and their teacher sponsors, who win awards for exhibits in microbiology at district, regional and state science fairs, and certain Local Branches give additional awards of \$25 for first place winners. ASM sponsors awards at the National Science Fair-International. Suggestions for experiments, projects, lists of films, references and other teaching aid material have been published by the Committee as a special issue (June 1960) of *The American Biology Teacher*. Teachers may obtain this publication from the Executive Secretary, ASM. Information relating to the above and a copy of a career brochure may be obtained free. A list of universities offering degree programs in bacteriology and/or microbiology is available at 50c. Address: Raymond W. Sarber, Executive Secretary, American Society for Microbiology, 19875 Mack Ave., Detroit 36, Mich. A 15-minute color movie, "A Career in Bacteriology," may be rented or purchased from Audio-Visual Center, Indiana University, Bloomington, Ind., and other sources.

American Veterinary Medical Association

Veterinary associations are being encouraged to assist students toward 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 10c each. Sponsors may obtain a list of veterinary medical organizations to contact for direct assistance. AVMA presents awards at the National Science Fair-International; top winner is guest at the AVMA annual meeting. Address: Heinz R. Kuehn, Director 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 which have been alerted to manpower problems and to the need for career planning. Many chambers cooperate with school officials in planning and conducting: "Business-Education Days" in which teachers and counselors visit local businesses to learn future career needs; "Education-Business Days" when businessmen visit schools to learn how the teacher can be aided; "Career Conferences for Teen-Agers" in which students have the opportunity to learn the trends in local manpower needs and the types of 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 further information consult your local Chamber of Commerce or write to the U. S. Chamber of Commerce at 1615 H St., N.W., Washington 6, D. C.

Thomas Alva Edison Foundation

The Edison Foundation directs programs to encourage boys and girls to undertake careers in science and engineering. The Foundation conducts a public information program for improving the quality and quantity of science education. Science Youth Day, held annually on Thomas Alva Edison's birthday, February 11, is a nation-wide program to interest young people in science and engineering. Participating in this International Edison Birthday Celebration are major companies of American industry, governmental agencies, professional, scientific and educational societies, and other groups in the United States and abroad. Science experiment booklets and other free materials are distributed to students. Student visits to industrial plants and 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 by writing to Thomas Alva Edison Foundation, Inc., 8 W. 40th St., New York 18, N. Y.

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

inquires on special problems in connection with science, technology and careers. The Scientific Manpower Commission may be consulted on Selective Service and other military problems.

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 in high schools by local industry and/or professional groups throughout the United States and two foreign countries. JETS provides free materials for initiating and operating the chapters. The program includes a National Project Exposition with awards and scholarships. JETS offers the students an opportunity to explore the various technical fields and to compare attitudes, interests and abilities with the requirements of technical professions through actual experiences and contacts. Write JETS, P. O. Box 589, East Lansing, Mich.

Manufacturing Chemists' Association, Inc.

MCA, representing the chemical manufacturing industry, executes an aid-to-education program that embraces all levels from kindergarten to college. For information, request free copy: *An Industry Helps Our Schools*. Holt, Rinehart and Winston, 383 Madison Ave., New York 17, N. Y., is now sole distributor of *Scientific Experiments in Chemistry* (for senior highs), *Superstition to Supersonics* (for junior highs), and *Matter, Energy and Change* (for elementary school supervisors and teachers). For information on MCA's chemistry films ("Combustion"; "Chlorine—A Representative Halogen"; "Oxidation-Reduction" and "Chemistry of Water") write Southerland 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 with *Teacher's Guide*, 45c to educators. Address: Manufacturing Chemists' Association, 1825 Connecticut Ave., N.W., Washington 9, D. C.

National Academy of Sciences-National Research Council

Through its Advisory Board on Education the NAS-NRC works with scientists and scholarly organizations for improvement of science education at all levels. Principal attention is given to programs designed to improve the preparation of teachers, at graduate and undergraduate levels, and to expansion of opportunities for continual professional development. Action is being taken to promote better planning for production and use of films and television in science education. In cooperation with local and national industries and associations, community action is promoted to develop better local understanding and support of schools. Address: Advisory Board on Education, National Academy of Sciences-National Research Council, 2101 Constitution Ave., N.W., Washington 25, D. C.

National Association of Manufacturers of the U. S. of America

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, *Your Opportunities in Industry as a Technician* and *Industrial Research and Development*, have been distributed in large numbers. Copies free on request as long as current supply lasts. Address: Education Dept., National Association of Manufacturers, 2 E. 48th St., New York N. Y.

National Aviation Education Council

To help secondary school teachers stimulate

interest in science or mathematics as they relate to aviation and space exploration, NAEC publishes a *Teaching Guide for the Earth and Space Science Course* (\$1), *Science Teaching Aids for a Stronger America* (75c) and *Mathematics Teaching Aids for a Stronger America* (75c) offer suggestions for using aviation facts and principles in the classroom. *Guidance Aids for a Stronger America* (75c) is a handbook for guidance counselors. *The Arithmetic of Flying* (50c) includes more than 250 arithmetic problems like those pilots of light aircraft solve in order to fly safely. *1961 U. S. Aircraft, Missiles, and Spacecraft* (\$1.50) describes products of U. S. aerospace industry. *The Space Frontier* (50c), newly revised and updated, includes a log of all U. S. and Soviet satellite and space probes and a greatly enlarged glossary of astronautics terms. A special *Science-Mathematics Packet* (\$11.39) includes 15 books useful in science and mathematics classrooms, a bonus of three booklets and a 4-color Astronautic Systems chart (22" x 46"). To provide aviation and space information to schools, libraries and individuals, NAEC offers a mailing service (\$5 a year). Aids as units on rockets and space travel, bibliographies, *Skylights* (an aerospace fact sheet) and *Pictures, Pamphlets and Packets* (a source book of free and inexpensive aids) available to teachers and librarians requesting them on school or library stationery. Address: National Aviation Education Council, 1025 Connecticut Ave., N.W., Washington 6, D. C.

National Committee for Careers in Medical Technology

This Committee is expanding its awards program for projects related to clinical laboratory medicine. In cooperation with the Intersociety Committee on Pathology Information, NCCMT supplies certificates for local and state medical technologist and pathologist societies to award at science fairs in their localities. Summer jobs in hospital pathology laboratories often accompany the local awards. A summer job with the American Registry of Pathology at the Armed Forces Institute of Pathology in Washington, D. C., plus \$300 for travel expenses was First Prize for a pathology-medical technology project at the National Science Fair-International. Second prize was a \$100 Bond. The committee distributes career guidance information, including pamphlets and films describing the profession of medical technology, and data on aptitudes, training, qualifications and salaries. 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. The stipend accompanying each scholarship is based on need and may vary from \$100 to \$1,500 a year. Winners choose their colleges and curricula during the competition. A supplemental grant to the college usually accompanies the scholarship award. Last year 960 Merit Scholarships were awarded, including some 563 Merit Scholarships offered by and named for 139 business organizations. Registration for the Merit Scholarship Program is by high school. Each principal is sent registration materials in September. The following Spring, the National Merit Scholarship Qualifying Test, the first step in the competition, is administered to second-semester juniors and first-semester seniors. Participating students pay a \$1 testing fee to the testing agency. The 1961-62 competitions began with the Qualifying Test in March 1961. Winners will be announced in the Spring of 1962. The test for the 1962-63 competition will be given either Tuesday, March 6, or Satur-

day, March 10, 1962, to students who will enter college in 1963. Since the inception of the Merit Program in 1955, nearly \$25 million in Merit Scholarships have been awarded to 4,897 students. For information see your principal or write: National Merit Scholarship Corporation, 1580 Sherman Ave., Evanston, Ill.

National Pest Control Association

The 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 Association, 250 West Jersey Street, 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, a department of NEA and affiliate of AAAS. Annual membership (\$6) provides: 8 issues of *The Science Teacher* and NSTA Packet Service. Publications available are: *Planning for Excellence in High School Science* (\$1), *Quality Science for Secondary Schools* (\$3), *New Development in High School Science Teaching* (\$1.50) and *Careers in Science Teaching* (one copy free). Activities include annual convention, nine regional meetings and maintaining a national registry of science and mathematics teachers. NSTA sponsors Future Scientists of America, a junior and senior high school club-type activity. Services and materials include: *FSA Sponsor's Guidebook*, Charter Plaque, *FSA Centrifuge* newsletter and other free and low cost student publications. Membership cost is based on school enrollment. The FSA program of Awards, now in its 11th year and open to students in public, private and parochial schools for research-type projects or investigations, offers \$250 scholarships to 25 (11-12 graders), 660 medallion awards (7-12 graders), 2000 honorable mention certificates and certificates to schools of award winners. *Vistas of Science*, books on topics such as spacecraft, measurement and cell physiology, will be available in November. (A copy of each free to FSA chapters.) Write: National Science Teachers Association, 1201 16th St., N.W., Washington 6, D. C.

National Youth Conference on the Atom

Approximately sixty investor-owned electric utility companies are sponsoring attendance of outstanding high school science students and teachers to the 1961 National Youth Conference on the Atom, November 9-11, The Palmer House, Chicago. "The purpose of the conference is to present to a group of the Nation's most able high school 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 in the United States." Selection of student and teacher delegates is carried out locally by education authorities working with the electric companies. For information query your local electric company or write: T. R. Jordan, Electric Companies Public Information Program, Bozell & Jacobs, Inc., 230 Park Ave., New York 17, N. Y.

New England Council

The New England Council has established a Program of Industry Aids to Education, designed to provide a means through which industry, professional societies and schools may work together. The Program is developing this link first in the sciences and math at the secondary and elementary school level on the basis that industry has, through knowledge, experience and resources, the tools to help meet many of the schools' needs. The Program plans to have available listings of industry's resources throughout New England, and source material valuable to teachers. Write: Robert M. Burnett, Industry Aids to Education, New England Council, Stetson Building, Boston 16, Mass.

Oak Ridge Institute of Nuclear Studies

ORINS is a non-profit 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 school science teachers to become either "traveling teachers" or specialists in their own systems; the administration of graduate fellowship programs, traveling atomic energy exhibits, student tours of nuclear facilities, and a college student training program; the presentation of courses in the use of radioisotopes, special courses for high school and college teachers, and symposia and conferences; the maintenance of a medical research hospital, a museum of atomic energy, and a technical library; and the provision of lecturers for universities, research opportunities for university scientists, and a mobile radioisotopes laboratory for on-campus college training. No program of the Institute is limited to participation by member universities. 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 has eight sections: Rochester, N. Y.; Boston, Mass.; Detroit, Mich.; Chicago, Ill.; Niagara Frontier; South Western Connecticut; Northern and Southern California, which welcomes young scientists to their meetings (write to your local section and ask for a program). OSA Student Memberships are available at \$2 a year. These 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. Citations and book awards may be offered to regional fairs. For information about careers in optics, summer employment opportunities, speakers and information about OSA local sections, write: Executive Office, Optical Society of America, 1155 16th St., Washington 6, D. C.

Science Service

Science Service is the non-profit institution for the popularization of science, with trustees nominated by the NAS, NRC, AAAS, E. W. Scripps Estate and the journalistic profession. It operates as a news service to newspapers and magazines, publishes magazines, issues experi-

mental kits, conducts Science Clubs of America, Science Talent Search and National Science Fair-International. Adult sponsors are invited to affiliate classes, groups or clubs and receive free the *SCA Sponsor Handbook* and other aids. The Science Talent Search, conducted by Science Clubs of America and sponsored by the Westinghouse Educational Foundation, is open to high school seniors. The 21st Science Talent Search begins in December 1961. Teachers should ask for examinations about Oct. 15. Completed entries must arrive at Science Service not later than midnight, Dec. 27. *How You Can Search for Science Talent* sent free on request. Young scientists in schools show projects in thousands of science fairs. The best of these compete in regional fairs, which will send their two top sophomore, junior or senior finalists to the 13th National Science Fair-International in Seattle, Wash., May 2-5, 1962. For information, write Science Service. Free material available on various activities and samples of publications sent on request. *Science News Letter*, weekly summary of current science, \$5.50 a year, trial \$3.13 for 41 weeks; *Chemistry*, eight issues, \$4 a year; *Things of Science*, monthly experimental kits, membership \$5 a year, Science Service Books, each \$2 postpaid: *Science Exhibits*, *Scientific Instruments You Can Make*, *Organic Chemistry for the Home Lab*, *Experimenting with Chemistry*, *The Chemical Elements and Science Projects Handbook*, 55c each postpaid, 10 for \$5. *Wonderful World of Science*, 50c (plus 5c postage), 10 for \$5, postpaid. *Thousands of Science Projects* listing titles of exhibits, 25c a copy, 10 for \$1. Color Slide Sets: National Science Fair (7 sets), Elementary and Junior High School Science Projects (1 set), The Science Talent Search (1 set). Each set, 30 slides, \$6. Science Service, 1719 N St., N.W., Washington 6, D. C.

Scientific Apparatus Makers Association

SAMA represents some of the nation's principal manufacturers and dealers in the scientific laboratory and equipment industry. It is concerned that educators and students have at their disposal the finest and most up-to-date tools of their profession. Through yearly awards, cooperation with Federal educational agencies and direct liaison with leading professional societies, the SAMA supplements its member companies' efforts to better prepare our nation's scientists and engineers. Leaflets and reprints of published articles available without charge: *A Guide to Evaluating Your Science Facilities*, *Your Career with the Instrument and Control Industry by the Recorder-Controller Section*, *How to Help Your Town's Editor*, *I Am the Science Teacher*, *SAMA Motion Picture Film Directory*, *Chart-Suggested Built-In Instruments and Equipment For Laboratory Furniture—Including Certain Specific Finish Requirements*. Write: Dir. Public Information, Scientific Apparatus Makers Association, 20 N. Wacker Dr., Chicago 6, Ill.

The National Foundation

The Health Scholarship program of the National Foundation helps deserving students interested in careers in nursing, occupational therapy, physical therapy, medical social work and medicine and thereby helps to alleviate shortages of personnel in these fields. Approximately 500 Health Scholarships, four-year awards, are offered each year to high school seniors and college undergraduates. They pay \$500 a year, renewable annually, for a total of \$2,000. They 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.

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. Soil Conservation Service

The Soil Conservation Service, an agency of the U. S. Department of Agriculture, furnishes technical assistance to establish soil and water conservation programs and provides informational materials to teachers and others. Career leaflets: *Students—Start Your Career in SCS Before You Graduate*—Misc. Pub. #714, *An Engineering Career For You In SCS*—Misc. Pub. #715, *A Soil Science Career For You in SCS*—Misc. Pub. #716, *Careers in SCS*—Misc. Pub. #717 are available. *Teaching Soil and Water Conservation—A Classroom and Field Guide* PA #341 and other materials are available to teachers, librarians and leaders. Contact state and local Soil Conservation Service 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. For details, write: Science Service.

U. S. Army

The U. S. Army will award trips to its research and development facilities to 16 National Science Fair-International finalists for exhibits in eight specialized fields. Affiliated fairs will be supported by area commanders.

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 13th NSF-I.