

GENERAL SCIENCE

Science for Everybody

Favorite Hobby Keeps Boys and Girls Willingly After School; Youngsters Up to 85 Grind Telescope Mirrors

By WATSON DAVIS

Director, Science Service

AMERICA is going in for club life in a big way these days.

It is not the kind of high, exclusive living that you read about in the society novels. It has been called "the most hopeful phenomenon in American life today"—the banding together of amateur scientists, young and old, into clubs to make telescopes, collect insects, take photographs, raise animals, breed fishes, make radio sets, and engage in hundreds of other scientific hobbies and activities.

For science clubs are the favorite evening hobby of many neighborhoods. Boys and girls willingly stay after school to work in science laboratories and perform their experiments, aided by teachers who sponsor such extra activities. Youngsters up to 85 may be found grinding telescope mirrors or charting the light of variable stars—or doing dozens of other scientific tasks for the fun of it.

Men who work in shops have their own groups that often pursue science subjects quite remote from their daily work.

Age or youth is no barrier to such useful activities. In fact, fathers and sons and mothers and daughters often become members of the same club on a plane of equality in interest and effort.

In Almost Every High School

In almost every one of America's 20,000 high schools there are one or more science clubs, some tackling science in general and some limiting themselves to some particular subject such as radio, or physics, or chemistry, or biology.

Unheralded in most localities, there are many thousands of informal science clubs organized among adults who often find working in science as an avocation more interesting than their regular work. In the Philadelphia area alone there are some 300 such clubs with about 30,000 members.

The science club movement has become more than merely national, for there are clubs in Central and South America and even across the oceans.

To bring all the many local activities together into an international organization, Science Clubs of America is being sponsored by Science Service from its headquarters in Washington. Various services, such as helpful literature, advice from experts, hints on what to do and how to do it, insignia, and many other things will be provided by the national organization working in cooperation with local newspapers.

The real front-line work of science clubs will be done in their own localities. One of the most promising features of the enlarged movement is that clubs of adults will be able to cooperate with youth clubs, and all the clubs of a region will have the chance to attend meetings, conferences and exhibitions.

About a thousand high school clubs in every part of the nation are already

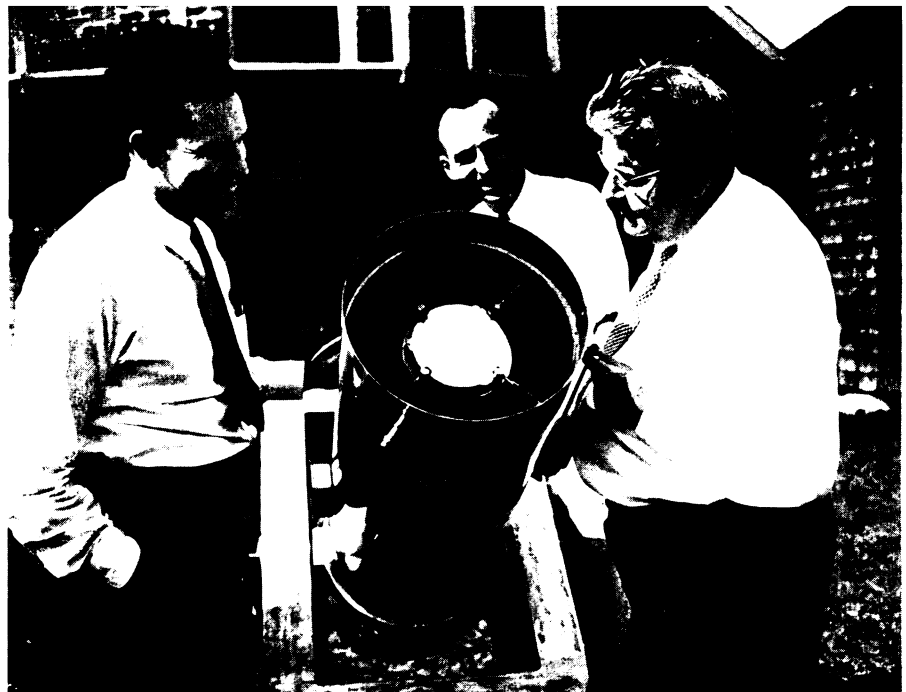
formally enrolled, with new charters being granted every day. Some of these have been in existence for many years, organized with the cooperation of local scientific bodies, and some were affiliated with the American Institute of the City of New York, which is now devoting its major energies to the New York area, while Science Service handles the national organization.

Academies of Science Joining

National and state science organizations are joining in the movement, particularly the state academies of science.

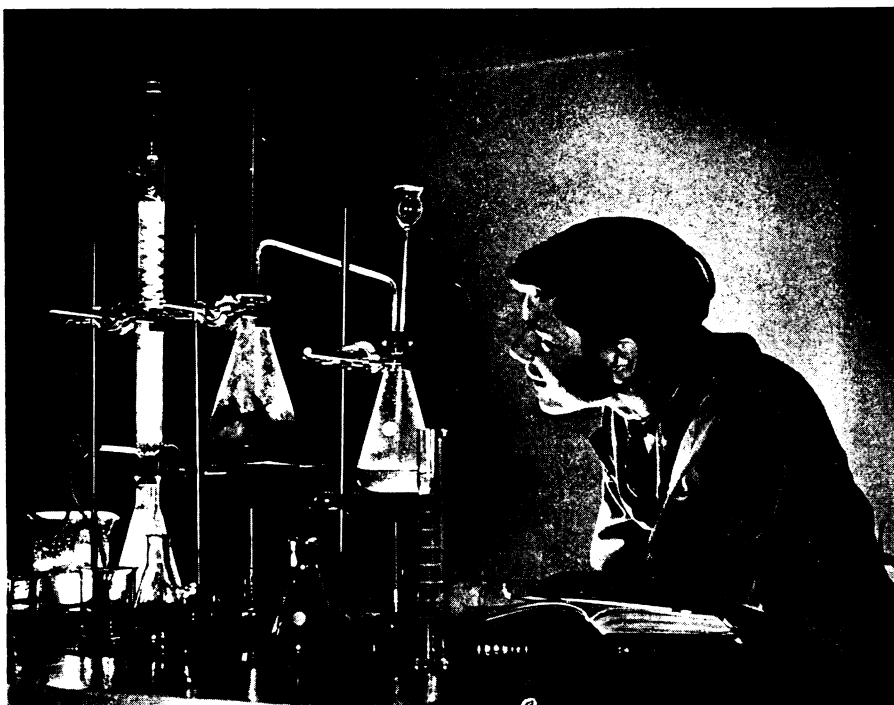
Museums, schools, libraries, industries, and newspapers are cooperating in various ways in making science clubs effective.

Hints on how to perform experiments and engage in science hobbies are published regularly in local newspapers and the SCIENCE NEWS LETTER. By bringing Science Service dispatches on discoveries and achievements in science to its readers



SKYSCRAPERS

That is the interesting name of the astronomical society in Providence, R. I., that built this Schwarzschild camera used by Prof. Charles H. Smiley, of Brown University (center) on an eclipse expedition. W. Edwin Stevens, left, and J. Frank Morrissey, right, built the instrument.



SALVAGE

Conversion of garbage into valuable oils and fats is engaging the study of 14-year-old Wallace Cloud, working in the Science Laboratory of the American Institute of the City of New York.

regularly, the newspapers are furnishing material for discussion at club meetings.

Almost every field of science is being covered by science club activities. Some fields in which science clubs can work and study are: Aviation, agriculture, anatomy, architecture, astronomy, bacteriology, biology, chemistry, conservation, electricity, embryology, engineering, entomology, gardening, general science, geology, home economics, hydroponics, medicine, meteorology, microscopy, mineralogy, ornithology, photography, physics, radio, research, science writing, taxidermy, telegraphy, television.

Scientific Construction

Here are some of the things that science clubs have constructed: Communication systems . . . photo-electronic organ . . . reflecting telescope . . . electrocardiograph . . . models of planes, trains, ships, wind tunnels, Link trainer, naval base, seismograph, stroboscope, bridges, electric eyes, water purification plant, coal tar plant, petroleum refinery . . . a House of Magic . . . arc furnace . . . motors . . . transmitting sets . . . bird houses.

Almost anyone can organize a science club. The organizer does not have to be a scientist. He need not

have studied science in school or college. He and the members of the club should be interested in doing something or studying some particular thing. There are no troublesome details or examinations. You can make your own rules and hold your meetings when and where you wish. Five is usually considered a minimum number to bring together to form a club.

Because Science Service is an educational non-profit institution, affiliation with Science Clubs of America is simple. Any group can affiliate with Science Clubs of America for a nominal \$2 and receive booklets telling how to organize, what to do, membership cards for all members and a club charter for framing. One feature of this certificate is that its gold seal has a ribbon, not of outmoded silk, but of fibers of glass, symbolic of the achievements of modern science.

Individuals May Be Associates

Any individual may become an associate of Science Clubs of America for a quarter, receiving not only a membership card but a useful book, the Science Handbook for 1942, ready at New Year's.

Science Service, from its own building

at 1719 N Street, Washington, D. C., will supply information about science clubs and answer any questions you may have.

Leading scientists look upon science clubs as serious aids to American progress in peace and war. Scientific hobbies can be much more than mere leisure time activity, amusement or recreation. They can even aid materially professional science research programs.

In the organization of home defense now underway, science club members can take a leading part in the more technical phases of protecting America.

Science News Letter, October 25, 1941

MILITARY SCIENCE

Defense Research Products Already Used in Battle

SOME EQUIPMENT developed by American scientists in the short space of one year's defense research has already seen trial under actual war conditions, President Karl T. Compton of the Massachusetts Institute of Technology told the 175th Anniversary Celebration of Rutgers University.

In a number of other directions the work of the National Defense Research Committee has been reflected in purchase orders for materials and equipment by the Army and Navy, Dr. Compton added. Much equipment developed by the researches of some 5,000 scientists and staff has undergone field test by the military services.

While the scientists engaged in the governmental research on defense approach their work with the enthusiastic conviction that it is well worth doing, Dr. Compton said that "in many cases there has been some inclination to doubt whether the armed services give adequate recognition to the significance of the results being obtained and show as much enthusiasm as could be wished about putting the results into production and use."

Science News Letter, October 25, 1941

● RADIO

Thursday, October 30, 3:45 p.m., EST

On "Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Harlow Shapley, director of Harvard College Observatory, will discuss the role of the colleges and universities in advancing fundamental science.

Listen in each Thursday.

Monday, November 3, 9:30 p.m., EST

Science Clubs of America program over WRUL, Boston, on 6.04 and 11.73 megacycles.

One in a series of regular periods over this short wave station to serve science clubs, particularly in high schools, throughout the Americas. Have your science group listen in at this time.