

school and many have commented that their teachers provided the original impetus.

The ages of 10, 13 and 14 are nearly as productive of aspiring pre-scientists, with the 10-year-olds showing up as predominantly self-starters. On the other hand, statistics on the entire group of finalists reveal that nearly a third of them reported that the source of their personal "itch" to explore the realms of science was teachers, texts, laboratory experience, demonstrations and equipment at school.

Home influences were significant in the development of more than a fourth of the finalists who felt that their parents or other members of the family, home atmosphere and opportunities, family friends and activities and trips, and similar influences were responsible.

Other sources mentioned frequently during the years of SCIENCE SERVICE studies were, in order of effectiveness, books, magazines, pamphlets and other reading material; scientific equipment and kits; science fairs, clubs and other organization activities; curiosity, observation, "the need to know" and other personal drives; and such motivating forces as discussions with scientists,

visits to scientific institutions, television programs, and science seminars.

About half of the previous ISF finalists may reasonably be expected to change their minds about their specific choice of scientific specialty as they progress through college and graduate school and acquire immediate experience within the various disciplines.

Some, of course, will discover that they are not really scientists at all and can contribute much more to some other field. Even they, however, can be counted on to retain a particular empathy with scientists and the pursuit of scientific truths. Having had a personal glimpse of the "inexhaustible pleasure" inherent in science, they will almost inevitably be more knowledgeable voters, legislators, economists, conservationists, teachers, ministers, writers, or whatever. Certainly they can lend enlightened parental support and fairly intelligent advice if their children should someday show symptoms of science-susceptibility.

For information about the International Science Fair write to Science Service, 1719 N St., N.W., Washington, D.C. 20036.

• Science News, 89:216 April 2, 1966

Science Club News

Busy With Fairs

► THE BIGGEST science club news now is concerned with science fairs. Most science club members are entering projects, and many clubs are hosting the event in their school, while a Waycross, Ga., club is hosting the regional science fair.

Science projects are considered so important by the St. Johns High School Science Club in St. Johns, Ariz., that new members must have a project underway after one semester, or their club membership is canceled. This is related to the purpose of the Bethany Science Club, Bethany Jr.-Sr. H.S., Bethany, Okla., which considers its function to be "showing younger students that science is an area of learning that is interesting and rewarding." This is carried to the community at large by the St. Aloysius Academy Science Club, New Lexington, Ohio, which has conducted a study of the process and effect of strip mining in their area. The Pembroke Central Science Club, Pembroke Jr.-Sr. H.S., Corfu, N.Y., presents a display of scientific value which is changed bi-weekly.

Interest in science is heightened through competition also in the form of "Science Bowl," patterned after College Bowl, in which members of the Aretus Saunders Science Club, at Bridgeport (Conn.) Central H.S. answer scientific questions. The Mathletes of Bishop (Calif.) Union H.S. have a monthly competition with other schools.

Trips to scientific establishments and cities with varied science activity are conducted by the Alpha Beta Gamma Math and Science Club of Auburn (Nebr.) H.S., with visits to Washington, Chicago and Denver, and by the Chemocrats of Southern Colorado State College, Pueblo, who have traveled by bus to 21 states, Canada and Mexico, and are planning a trip to Cape Kennedy this summer. They have seen many different scientific institutions and activities along the way.

The Loreto Science Club of Loreto Convent, Limuru, Kenya, has concentrated on the construction of scientific equipment such as kaleidoscopes, and telegraph sets, from scrap materials.

Junior Science Club in Phoenix, Ariz., is sponsored by that city's Sunrise Optimist Club, which is very interested in promoting science interest among young scientists. All science

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GETTING READY—The satisfaction and unpredictable hazards of setting up a science project are lived through by a two-time finalist at last year's International Science Fair while his sponsor offers moral support.

Science Club News

(Continued from p. 218)

clubs are indebted to helpful adults in some degree, and most reciprocate in some way through community service projects of their own. The Phi-Bi-Chem Science Club of Thomas Dale H.S. in Chester, Va., for example, distributed Christmas baskets to the poor.

Dentsville Science Club of Dentsville H.S., Columbia, S.C. 29206, is newly organized. To date they have had field trips, demonstrations, and visiting scientists. They would like to communicate with other science clubs to exchange ideas.

With so many science club members entering projects in science fairs, it is likely that many of the International Science Fair finalists will be members of science clubs. Science clubs within range of Dallas, Texas, might like to begin planning now for a club trip to visit the ISF.

The International Science Fair will be held in the Dallas Memorial Auditorium, and the exhibits will be open to the public on Thursday and Friday, May 12 and 13, from 8:30 a.m. to 9:30 p.m. both days.

Finalists will be with their exhibits from 9:30 to 11:30 a.m. and again from 3:00 to 5:00 p.m. on both days.

Those science clubs finding such a visit possible can be assured of a most worthwhile experience.

Would your science club like to share ideas and activities that would be of interest and assistance to other clubs? Send a report to Science Clubs of America, 1719 N St., N.W., Washington, D.C. 20036.

• Science News, 89:218 April 2, 1966

ARCHAEOLOGY

Village 9,500 Years Old Unearthed in Syria

➤ ANOTHER ancient village site has added support to the growing evidence that early man built permanent settlements before he learned to grow crops and raise domestic animals.

Huts of a village estimated to be about 9,500 years old were unearthed at Tell Mureybat, a large mound on the Euphrates River, 200 miles from Damascus, Syria. They were constructed on a stone foundation with clay floors and walls built over a frame of wood and reeds, reported Dr. Maurits van Loon, of the University of Chicago.

Archaeologists also excavated curved-walled houses built with uneven pavements that were sunk at the center to form hearths and bordered by stones set on edge in hard red clay. Straight-walled houses were found with limestone floors covered with clay.

The best preserved house was 12 feet square and included four small square rooms each five feet by five. The rooms had no doorways, and the people must

have entered through the roof, Dr. van Loon said.

Scientists have long debated whether early man began to build permanent settlements before or after he learned to domesticate animals and grow crops. Prior to the agricultural and animal husbandry revolutions in the evolution of man, tribes roamed about, constantly following herds of wild beasts and gathering wild berries and fruits from the vegetation they found along the way.

Now archaeological evidence from the Mureybat site indicates that the inhabitants lived entirely on hunting and on harvesting of wild crops, Dr. van Loon said. Bones found around the site were identified as those of wild cattle, onagers, gazelles, boars, pigs, wolves and hares. More than 15,000 chipped stone tools were found, including heavy and light scrapers, picks, sledges, graters and arrowheads.

The archaeological project was supported by the National Science Foundation.

• Science News, 89:231 April 2, 1966

Nature Note

Springtails

➤ SOME OF THE most primitive of all insects, the springtails are so named because under each one's short abdomen is a tiny mechanism that acts like a strong spring to catapult the tiny creature about two inches through the air. The insects themselves are only about one-fifth of an inch long.

These odd, primitive little creatures, belonging to the Collembola order in the animal kingdom, are wingless. Some have only traces of eyes, and others have no eyes at all. With a fused thorax, or chest-like part, and a reduced abdomen, they look like funny hump-backed creatures from some other world. This is what the first insects on earth may have looked like 200 million years ago.

Living in moist or wet places throughout the world, the springtails can become a nuisance to man around maple sap buckets, mushroom beds or young growing seedlings. Some species engage in activity in spherical colonies an inch or two in diameter. Others can be found in freshwater pools or in tide-water pools along the northern sea-coasts. One unusual species lives in enormous numbers on the surface of the snow in cold desolate places such as the Arctic and the Antarctic. They thrive in these icy lands presumably on microscopic algae and diatoms, although scientists are still studying the habits of these ice-bound insects. Other species are found beneath the stones of penguin rookeries, and some have even been found inside the shells of barnacles.

• Science News, 89:231 April 2, 1966

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