cumvent this problem I delay all demonstrations until about eight weeks into the first semester; that is, until I've been able to present a fair picture of molecular and cellular biology, ecology, the history of biologic achievements, and some microbiology. In some instances with the most prolific demonstrators, I simply demand that they stay in class and undertake a few laboratory experiences before making any more trips to the grade schools.

The greedy elementary-school teacher who, having found a good thing, tries to induce the high school students to practically teach his classes is a real problem. Such teachers, after having numerous biology demonstrations from the same students, have tried to coerce them into giving presentations having to do with earth science and fields of science in which my students clearly were unprepared. I do my best to see that students give presentations under several grade-school teachers, not just one; and I allow only biology demonstrations to be given.

Another problem is grading. No more than a fourth of my students at any time are giving demonstrations; the rest are content with regular class activities. The latter students pose no problem, but how much should demonstrations count toward the former's final grades? Clearly, if demonstrators are gone much of the time from class their scholastic work will suffer. I made an arbitrary decision shortly after the success of the project became apparent: students giving demonstrations must earn at least a passing grade during each six-week period. For every three acceptable demonstrations a student gives, his six-weeks' grade is raised one full point. The "average" demonstrator earns a C scholastically and does three demonstrations in a six-week period; thus he receives a B. He may relax during the next six weeks, do no demonstrations, but earn a B scholastically. My greatest satisfaction comes from the student who, having nearly failed in his scholastic work in the initial six weeks, decides to do some demonstrations, raises his grade by doing them to a C or a B, then quits doing demonstrations and, with his confidence in himself raised, earns Bs and Cs scholastically.

Conclusion

If you are a high school science teacher staring sadly at a number of students who are staring listlessly back at you, and if your district has a poor grade-school science program: think! That student you almost flunked could be down in one of the grade schools telling an enthusiastic group of first-graders about bacteria and showing them how to print their initials with *Sarcina lutea* on an agar plate. If he were to return two days later to that classroom for a follow-up talk and the children flocked around him, showing him how their initials "grew" from indistinct streaks to brilliant yellow letters, he would not be the same student. Next week he could be with fourth-graders outside their school building. He may have already explained the functioning of the circulatory system to them and showed them how to find and count each other's pulses. He could then have them run across the playground and back. After the children return, he could again have them take their pulses. Then he could lead a discussion of why the rates are so much faster. And he might well walk back into your classroom with his own pulse a bit more rapid and his mind tuned up—ready to learn something, fast.

Cornell Professor Honored

Verne N. Rockcastle, professor of science education at Cornell University, has received the Eva L. Gordon Award for Children's Literature. This annual award of the American Nature Study Society is named for the late Cornell professor of nature, science, and conservation education. Rockcastle's current interest is the development of a low-cost science curriculum for kindergarten through the sixth grade. During his career he has written more than 70 articles on science education.

Whooping Crane Is Winning

According to recent government wildlife reports, North America's largest bird, the whooping crane, is winning its battle for survival. On the verge of extinction in the 1940s, the whooper population in the wild now numbers about 60. The census of the birds reached its low point in recent years, when only 14 were counted in their special winter refuge on the Texas coast.

Biologists don't exactly know how many of the birds once existed, but they do know that at one time the cranes ranged over much of the continent: from the Arctic to central Mexico and from the Rockies to the Atlantic. As man gradually encroached on their habitat, their numbers shrank to the point of virtual extinction.

In order to save the cranes, an effort was launched to find their summer nesting grounds, their migration routes, and their winter habitats. Finally, the birds were spotted in a remote wilderness in northern Alberta and the adjacent Northwest Territories, in a land of muskeg and stunted spruce so isolated that few white men or Indians had ever ventured there. The place where the cranes lay their priceless eggs is now protected within the boundaries of Canada's Wood Buffalo National Park.

The winter habitat, the Aransas Refuge, was established in 1937 to protect whoopers and other threatened wildlife. The first accurate count of whoopers made there, in 1940, showed 22 adults and six young on the refuge or on nearby Matagorda Island. The 1970 winter count showed 51 adults and six young.

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