

societies will willingly give up their nominal control remains to be seen.

Proposed changes in the AAAS governing structure are expected to surface sometime later this year. A Committee on Governance, appointed by the board of directors and the Committee on Council Affairs, has been working out a new voting system, and while the committee has not yet published its position paper, enough is known about the group's thinking to report that it will recommend a radical restructuring of the AAAS. The committee is expected to recommend that the Council be reduced in size from the present unwieldy 530 members to about 70 members; that the Council be elected by individual AAAS members rather than by the affiliated societies; and that all members of the AAAS have voting privileges rather than just the AAAS fellows, who comprise perhaps 15 percent of the membership and who currently elect a minority of the members of the Council.

The precise wording of the recommendations will be awaited with interest, for there is great concern among some AAAS members that the organization might somehow fall into the hands of laymen and cease to be a scientific organization. These members fear that as the AAAS expands its membership it will inevitably attract more nonscientists, and that these nonscientists might conceivably elect their own kind to leadership positions. Such fears led the Council, at its meeting last December, to provide the following guideline:

The Committee on Governance is advised that it is the sense of the Council that any changes in governance should insure that the control of the activities of AAAS will be in the hands of *bona fide* scientists or societies of scientists. This is not meant to restrict individual membership of persons in AAAS for the purposes of being sympathetic to its objectives or of being informed of its activities.

One likely possibility is that there will be two classes of membership in AAAS, with the scientists (however they might be defined) remaining in control.

Just what a newly democratized AAAS might do to carry out its ambitious mandate is not yet clear, but Bevan and other AAAS officials have thrown out a number of ideas for consideration. They include:

► Acting as a "broker" of scientific talent by bringing people together to

consider the implications of such problems as the SST or power plants. This would be a role somewhat analogous to that played by the National Academy of Sciences, but the AAAS might seem more "independent" and less suspect than the Academy because it has fewer ties to the federal government than the Academy does.

► Acting as a "lower house of science" that would express the views of the citizen scientist, in contrast to such "elitist" bodies as the government science advisory committees and the Academy.

► Acting as a "watchdog" to call government officials to account, either

in forums at the annual meeting or through reports issued by special study committees.

► Sponsoring more "technology assessment" studies analogous to the AAAS investigation of the impact of herbicides in Vietnam. The AAAS has already launched a study of power production under the direction of Barry Commoner, a Washington University biologist.

► Setting up regional centers through which scientists might assist local teachers or advise local mayors on how to handle pollution or other technological problems. Presumably the work would be voluntary and the

Drought Returns to the Land

The drought that is imperiling the life of Florida's Everglades, parching cattle lands in the Southwest, and delaying planting in many parts of the country has not been paralleled since the mid-1950's, when drought hit most of the country west of the Mississippi, and raises the spectre of the dust bowl days of the 1930's.

The current dry period is most severe in southern Florida, northern Texas and southwest Oklahoma, and parts of New Mexico, Arizona, and southern California. It is being sustained because prevailing winds are from the west instead of from the south, where they ordinarily pick up moisture from the Gulf of Mexico. The drought has been gaining momentum since it started in southwestern Oklahoma in late 1969. The whole Southwest was experiencing abnormally dry weather by last November.

While weathermen emphasize that periods of drought cannot be forecast with anything close to scientific precision, they predict that this spell of dry weather will continue in varying degrees of severity throughout the first half of this decade.

Cycles in the Weather

Wayne Palmer of the National Environmental Data Service says his study of western Kansas since the 1850's indicates that a drought cycle, recurring about every 20 years, exists in that area. Meteorologists have not reached agreement on the causes for these climatic fluctuations. Some ascribe them to extraterrestrial forces such as variations in solar energy. Others believe that weather patterns are created by the energy exchange processes between earth, sea, and atmosphere, which occur in cycles lasting from months to decades.

The terrible experiences in the Great Plains in the 1930's, when drought afflicted the entire midsection of the country from Canada to Mexico, had a tremendous impact on agricultural policy and thinking, says Palmer. The droughts finally brought home to farmers the fact that the dry farmlands of the West could not be tended in the same manner as the farmlands in the humid eastern portions of the country. Since then, a number of techniques have been developed to promote maximum absorption of rainwater and minimum loss of topsoil from dryness and high winds. These include new farm machinery that, instead of pulverizing soil, breaks it up into wind-resistant clods; terrace farming; and "trashy" farming (stubble mulch farming), which leaves the residue of previous crops exposed, thus stabilizing the soil and promoting better absorption of rainwater. But improved technology is still no match for a turned-off Mother Nature.—C.H.