THE FATE OF THE INDIGENOUS

ARTHUR N. WILCOX

University of Minnesota

The American people have in recent years been developing an appreciation of the importance of our native plants and animals, not merely in their appraisable value for sale, but in their indirect value as members of the communities of plants, animals and human beings. The scientific study of such matters as these, which is the field of ecology, may therefore be faced with a timely opportunity.

It is my purpose to call to your attention some of the possibilities of a long-time, coordinated study from the ecological point of view of the typical indigenous flora and fauna, to describe how such a study is being successfully conducted on a bit of coast land in England, and to point out that in Minnesota we have an exceptional opportunity for research of this sort which may be worthy of the active consideration of this Academy.

Several years ago my interest was attracted by a scheme for a complete biological study of an area on the South Haven Peninsula in Dorset, on the south coast of England. Under the encouragement of Captain C. Diver, a secretary of the British Genetical Association and a zoologist by training and by avocation, there is being brought into action "a body of workers who, while making separate studies of the groups in which they are specialists, will yet do so with a coordination in attack and a unity in aim towards the ultimate objective—the elucidation of the complex bonds that hold together a complete society of plants and animals." 2

The area being studied has special advantages for this purpose. It is well suited for ecological work, it has suffered little interference by man, it is abundant in features interesting to naturalists, and furthermore by its bracing sea air and its detachment from human industry it provides a pleasant place of refuge for naturalists who may desire a change of scene and who therefore may enjoy participating in the absorbing study proposed.

This area is a rather low-lying peninsula about two miles long and two-thirds of a mile wide, bounded on three sides by tidal water and with an easily defined artificial boundary at its base. A principal ridge of Eocene origin runs in the shape of a crescent partly across the base and along the harbor side of the peninsula, roughly paralleled toward the sea by three relatively recent ridges of blown sand. Now enclosed from even the high tides are several lakes and pools. This inland water covers about eighty of the approximately 750 acres. It is particularly fortunate that, at least as

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The importance of the cooperation of the two participants in the experimental setup cannot be overstated. The results of the experiments described in this paper are based on the assumption that the participants are aware of the goals and constraints of the experiment. This awareness is crucial for the successful completion of the tasks.

In the context of the experimental setup, the participants are required to work together to achieve a common goal. The cooperation between the two participants is essential for the success of the experiment. The participants are encouraged to communicate and coordinate their actions to ensure the completion of the tasks.

In conclusion, the cooperation of the two participants in the experimental setup is a critical factor in the success of the experiment. The importance of this cooperation cannot be overstated, and it is essential for the participants to be aware of the goals and constraints of the experiment.

References:


The coniferous forest was bordered to the west and south by deciduous forest. On the east and north, it was bordered by open fields and pastures. The region was rich in wildlife, with a variety of bird species, including the bobwhite quail, the Canada goose, and the black-bellied plover. The wooded areas were home to red squirrels, chipmunks, and a variety of other small mammals.

The region was also notable for its mineral resources, particularly iron ore. The mining of iron ore was a significant industry in the area, and the development of mining towns and settlements was common. The ore was transported by rail to nearby ports, where it was shipped to other parts of the country.

Despite its natural beauty and rich resources, the region was also characterized by a history of conflict and struggle. The area had been occupied by various Native American tribes for centuries, and the arrival of settlers and the development of mining and logging industries led to tensions and conflict.

The region was also affected by environmental challenges, including soil erosion and damage to waterways. These issues were addressed through various conservation efforts, including the establishment of protected areas and the implementation of land management practices.

Overall, the region was a unique and complex place, rich in natural beauty and history, but also facing its own challenges and opportunities.
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principally of farm woodlots, in most of which there has been some grazing. Probably the best remnant of unpastured woodland is the Nerstrand Woods, of 1200 acres, which is now being subjected to cutting.

Of the three great biotic types, the prairie would probably offer the greatest difficulty in the location of a suitable natural area. The richness of the prairie land and its freedom from trees brought about its early cultivation, so that the unplowed prairie is now rare in Minnesota except along railroad rights of way. Nevertheless I have been led by reports to believe that a suitable area containing unbroken, but grazed, prairie could still be found in this state and some of the features of this formerly extensive but now rapidly vanishing biotic type could thereby be saved. The Section of Biology and Agriculture of the National Research Council has appointed a committee on the ecology of the prairie, which may be considering the preservation of such natural areas.

Some of the possibilities of cooperative, coordinated ecological research were outlined in the description of the study of South Haven Peninsula. The accomplishment of such research in the rich forest and prairie biotas of Minnesota would be a creditable achievement for this Academy of Science. But both for the Academy and for its members, the gains en route should be as important as the achievement. The cooperation not only of ecologists, but of the various kinds of biologists, botanists, zoologists, entomologists, mycologists and even biometrists, geneticists, chemists, geologists, and geographers would be utilized. Everyone from the high school teacher of biology to the narrow specialist could make his separate, published contribution. The closer association of our members from the several institutions and our cooperation in the common cause of the study of indigenous problems should be of great benefit.

In this age of specialization, the true naturalist is threatened with extinction. Might not this scheme help to restore his species, as well as those of certain plants and animals on which he works? There are advantages in affording the specialist exercise in the broad field of nature and in exposing him to less familiar biotic conditions. Who knows but that as Linnaeus was stimulated by his journey in Lapland, Darwin by his observations on the voyage of the Beagle, and Bateson by his study of the steppes, there might not some day be one student in Minnesota so stimulated by his study of our biotic types that his thought would carry a little farther to mark another milestone in the progress of natural science?

I have endeavored to suggest some of the possibilities in comprehensive research on the fate of the indigenous, and to emphasize the need of preserving, from the fate of further disturbance or extinction, of relatively undisturbed natural areas for scientific observation. The active encouragement of projects such as these might well be one of the functions of this Academy.