tion from two of four human stools tested by the method described.

ROSALIE J. SILVERBERG

DEPARTMENT OF PEDIATRICS,
STANFORD UNIVERSITY SCHOOL OF MEDICINE,
SAN FRANCISCO

## NEW PROTECTION FOR FIELD DATA

Mapping of vegetational types on the U.S. Fish and Wildlife Service's Patuxent Research Refuge, Bowie, Maryland, led to a search for a protective covering for field maps. The problem was solved by a commercially available acetate sheeting treated with a pressure sensitive adhesive. Developed as an easily applied protection for maps for the Army and Navy and commended after ample trial overseas, this material promises to be a boon to scientists who have long suffered with muddy maps and dog-eared data sheets. Easily peeled from the backing attached in manufacture, the film is simply smoothed with thumbnail pressure onto aerial photos, topographic or vegetational maps, relative humidity tables and other data subjected to repeated use, furnishing a transparent and waterproof covering.

While two types are available, clear and matte, the matte variety is quite transparent enough for most purposes and has the great advantage that it can be marked with pencil, crayon or ink (in washes as well as lines). Such marks adhere well but can be easily erased without damaging the surface. In this way, numerous changes can be made without defacing the original beneath. At the Patuxent Research

Refuge, the matte finish was found excellent for covering aerial photos, eliminating the glare from glossy prints without appreciably obscuring the details. When these photos were used for mapping vegetation, probable cover-types were speedily delineated in the laboratory, using an ordinary pencil. Then a relatively small amount of field work, using a red lead, sufficed to confirm or amend the boundaries and to delimit sub-types indistinguishable on the photographs.

When one area is under continuous scientific study, as at the Patuxent Research Refuge, wildlife census data or other observations can be recorded in the field on a map thus protected. After being copied and/or tabulated, the data can be erased leaving the map ready for use again.

Brief preliminary tests indicate many other uses for this material. For instance, the clear variety cut in strips can be used as a herbarium mounting tape in conjunction with the usual type of tape. Not requiring moistening and being transparent, it seems admirable for securing the more delicate plant parts. Its initial adhesion is not adequate to hold the more refractory parts, but where it does stick, it is claimed to form a permanent bond with the paper. Also, in the classroom, the sheeting can be used as a protective covering for illustrative material handed around for student use.

John W. Brainerd,

Collaborator

U. S. FISH AND WILDLIFE SERVICE, PATUXENT RESEARCH REFUGE, BOWIE, MD.

## DISCUSSION

## THE BUSH REPORT AND SENATE BILLS

In compliance with a request from President Roosevelt, dated November 17, 1944, Dr. Vannevar Bush undertook to advise the Government how science might be organized to serve our country in future days of peace as effectively as it was serving our armed forces during the war. In particular, the President inquired (a) what could be done, consistent with military security, to make known to the world the contributions to scientific knowledge during the war; (b) how a program might be organized to continue the scientific advances that had been made in the fields of medicine; (c) what the Government might at once and in the future do to aid research by public and private organizations; and (d) whether an effective program might be set up for discovering and developing scientific talent in American youth.

Dr. Bush appointed large committees of distinguished men to study and report on the four principal subjects enumerated above. After months of labor these committees presented comprehensive re-

ports, on the basis of which Dr. Bush made his report in compliance with the President's request. The report is developed under six chapter headings as follows: I, Introduction, a statement of the reasons that progress in science is essential and the relations of the Government to it; II, The War Against Disease; III, Science and the Public Welfare; IV, Renewal of Scientific Talent; V, A Problem of Scientific Reconversion; and VI, The Means to the End.

Under Chapter VI the report proposes a "National Research Foundation," including its purposes, its membership, its organization, its functions and duties, its patent policy, provisions for special authority, and its budget for five years. In short, it is a report that states a general problem of great importance, dissects it into its major components, sets up principles and outlines machinery for its administration, and proposes a financial budget, all fortified by comprehensive analyses and supporting data by very competent committees.

In spite of the excellence of the Bush Report, spe-