Protection Pays

IS IT WORTH while for farmers to protect and encourage wildlife? Demonstration that it is, even from a strictly financial viewpoint, was offered to the Wildlife Conference by Merrill C. Gilfillan of the Ohio Division of Conservation and Natural Resources.

Mr. Gilfillan deliberately chose one of the toughest problems in wildlife management that could be found in the United States: the northeastern part of Ohio, where there are many farmers all owning small, closely cultivated farms, and such big masses of urban population as Cleveland, Youngstown and Akron.

Cooperation of 23 farmers, with farms averaging only 68 acres each, was secured. They were shown how to make swamp and other uncultivable land as hospitable as possible to ducks, pheasants and other game birds, as well as to muskrats and other fur-bearing animals.

Carefully regulated hunting privileges were granted during the shooting season to city sportsmen who were more than willing to pay reasonable fees. In addition, the farmers themselves harvested muskrat and other pelts. Taken altogether, wildlife protection made this "useless" land yield about as much revenue per acre as neighboring cultivated fields.

Science News Letter, March 30, 1940

Coal Lands as Refuges

EMPTIED-OUT strip mines, hitherto disregarded as man-made deserts of no possible profit to anybody, are being made to yield substantial returns in fish, fowl and fur, Lee E. Yeager of the Illinois Natural History Survey reported.

Strip mines are coal workings where the overburden of soil is so thin that it is more practicable to clear it away with steam-shovels and drags than to sink shafts. When the coal is all taken out, the land is left as great raw ridges of piled earth and shale, interspersed with swamps and long ponds. Abandoned strip lands like this are common in several states of the Midwest.

Natural return of trees, brush and volunteer weed vegetation is beginning to afford suffcient shelter and food to encourage a considerable wildlife population, said Mr. Yeager. Speeding up the natural process by setting out the right types of vegetation has been found profitable in many places. The stripped lands, which would ordinarily yield nothing, are producing more game, fish and fur than similar areas along the margins of fertile fields.

Science News Letter, March 30, 1940

MEDICINE

New Kidney Hormone Helps Gastric Ulcer Sufferers

HOPE for high blood pressure and stomach ulcer patients appeared in discoveries announced at the meeting of the Federation of American Societies for Experimental Biology in New Orleans.

For the stomach ulcer patients there will be the new hormone urogastrone, obtained from kidney excretions. First trials on ten normal persons showed that this hormone can stop the formation of acid by the stomach, Drs. A. C. Ivy, E. Wiezcorowski and J. S. Gray, Northwestern University Medical School, reported. At present, ulcer patients must take alkaline powders to neutralize the acid in their stomachs so that it will not irritate the ulcers and cause bleeding.

The new hormone will be injected under the skin. Such injections at present cause swelling and reddening. Dr. Ivy and associates hope shortly to overcome this feature by further purification of the hormone, after which it will be ready for use in treating ulcer patients. The hormone treatment, by checking the acid in the stomach, will give the ulcer a chance to heal. To prevent recurrence of the ulcer, Dr. Ivy said, the patients must learn a new philosophy of life which will help them to take their worries more calmly.

Science News Letter, March 30, 1940

Lowers Blood Pressure

PATIENTS with malignant high blood pressure which could not be lowered by any other means, were helped by two new kidney extracts described by Drs. Irvine H. Page and O. M. Hel-

PACKAGED PEACOCKS

Modern high-speed transportation makes possible express shipments undreamed-of a few years ago. Here are three rare white peacocks that recently went from Havana to Boston by air express, simply wrapped in paper and tied with cord. They travelled with a minimum of discomfort and arrived with their beautiful white plumage unsoiled and unruffled. Had it been necessary to use older, slower ways, they would have had to ride in crates, and would have reached their destination with feathers (and probably dispositions) considerably rumpled.

mer, Lilly Laboratory for Clinical Research, Indianapolis, and Drs. J. R. Williams, Jr., T. R. Harrison and Arthur Grollman, Vanderbilt and Johns Hopkins Universities, to the Biology meeting. Not only was blood pressure reduced but the condition of the thickened arteries improved and the sometimes blinding eye disturbance accompanying very high blood pressure was cleared up.

Science News Letter, March 30, 1940

Pocket Oxygen Supply

PILOTS of bombing planes who have to bail out at altitudes of 35,000 feet can be saved from dying of oxygen lack on the way down to the ground by a new device presented by Dr. Walter M. Boothby of the Mayo Clinic to the Biology meeting. The device is a pocket-sized tube containing just enough oxygen to keep the pilot alive until he reaches an altitude low enough to breathe in. A new sponge rubber valve for the oxygen mask, which does not freeze at high altitudes as metal valves sometimes do, gives further protection to pilots of both bombing and other planes flying at high altitudes.

Science News Letter, March 30, 1940

French Digitalis Good

BETTER treatment for one million potential heart disease patients in the United States will result from experiments with a heart disease remedy announced by Drs. McKeen Cattell and Harry Gold, Cornell University Medical School, at the meeting of the Federation of American Societies for Experimental Biology in New Orleans.

The figure of one million heart disease patients is Dr. Gold's estimate of the number of persons in this country who will require the heart remedy, digitalis, before they die.

A French preparation of this material, which American physicians have thus far hesitated to use, is the best of the preparations of this drug from the foxglove plant, Drs. Cattell and Gold found. The French digitalis is more potent and more uniform than the others. Only three units of the French digitalis are needed to give the same effect on the patient's heart for which thirty units of other preparations are required. This extra strength may explain American physicians' hesitancy to use the French digitalis. Not knowing its strength, they may have used too much of it, with untoward results.

Digitalis preparations vary as much as 300% in strength, the Cornell investigators found. They believe present accepted methods of assaying digitalis strength by animal tests are not satisfactory. The French digitalis is a crystalline preparation and can therefore be assayed by chemical instead of animal tests. This allows the manufacturer to put up digitalis doses of uniform strength which are more useful to the physician who prescribes digitalis for his heart patients.

Science News Letter, March 30, 1940

Morphine Poisoning

PRESENT method of treating patients who try to commit suicide by taking overdoses of morphine are really only adding insult to injury, Drs. Lloyd W. Hazeltine and Theodore Koppanyi, Georgetown University, Washington, D. C., declared, on the basis of experiments with more than 30 rabbits reported to the Biology meeting. The present treatment is to give medicine like strychnine or caffeine which stimulate respiration, or breathing. The theory of this treatment is that morphine kills by stopping breathing.

Actually, the Georgetown investigators found, morphine poisoning has two effects. First, it slows breathing, but after that period it stimulates breathing, and this effect is augmented by the stimulating drugs. Blood circulation, they found, fails before breathing fails in morphine poisoning.

Science News Letter, March 30, 1940

PUBLIC HEALTH

Exposure to Sun Helps Prevent Cancer Deaths

Recent Studies Indicate Amount of Sunshine May Be Related to Cancer Incidence Though Sun May Cause It

EXPOSURE to sunlight during childhood and adolescence, though it may result in cancer of the skin or lips, helps to prevent death from cancer. This theory, developed by Dr. Sigismund Peller, Johns Hopkins School of Hygiene, is supported by U. S. Army figures in a report by Dr. Peller and Col. Charles G. Souder, M.C., U. S. Army. (*Army Medical Bulletin.*)

According to Dr. Peller's theory, development of the easily curable skin or lip cancers protects against development of cancer in parts of the body that are less accessible for treatment and which therefore are more likely to be fatal.

Of 242 white patients in the Army who were born in the southern tier of the States (south of the 40° of latitude), 110 or 45% had cancer of the skin or lip, while of 300 white cancer sufferers born in northern parts of the U. S. only 20% had skin or lip cancer, the Army records show. During the time of service, both northerners and southerners are under identical medical care and living conditions. The difference is about the same in officers as in enlisted men, and it is especially high during the first 10 to 15 years of active service. Later on this difference between the northern- and the southern-born di- (*Turn to page 207*)

PREVENTING cancer by sunlight may be possible if scientists can learn more about how the sun's rays affect the body. Evidence that exposure to sunlight does produce cancer immunity in some cases, was presented by Dr. Frank L. Apperly, Medical College of Virginia, to the American Association of Pathologists and Bacteriologists meeting in Pittsburgh.

Cancer mortality in the United States and Canada grows less, Dr. Apperly finds, as the amount of sunlight increases across the continent and as more people are exposed to sunshine, for example, where more of the population is engaged in farming or other outdoor occupation.

Differing from some other scientists who believe sunlight holds the key to cancer prevention, Dr. Apperly does not believe it is necessary to have skin cancer in order to become immune to other forms of cancer. Those who hold this view believe cancer deaths might be reduced by enough sunlight to cause skin cancer, which is easily cured, and which might leave the individual with immunity to other forms of cancer.

Sun rays, or something closely associated with them, Dr. Apperly declared, have two separate effects: 1. they produce some sort of relative immunity to