

Press Bulletin No. 153.

Agricultural Experiment Station
 Kansas State Agricultural College.

Poisons for Prairie-dogs and Gophers.

It is well known to most of the citizens of Kansas, that the Experiment Station at Manhattan has been engaged for several years in the manufacture and sale of poisons for the destruction of the prairie-dog and the gopher—two pests that yearly cause much loss to farmers in regions infested by them. For four years this work was carried on by means of appropriations by the State Legislature, but at the last session this aid was withdrawn, since which time the support of the enterprise has been assumed by the Station alone. However, the price of the poison has been set at a figure that renders the work practically self-supporting, the work having been placed in the hands of the Entomologist of the Station without extra remuneration.

The poison for prairie-dogs is made according to a patented formula of which the State right was purchased from the inventor, Mr. David W. Staples, of Craft, Oklahoma, and the poison for gophers is an adaptation of the formula better suited for attracting the gopher. Both of them poisons have been used very generally throughout the State, and have given great satisfaction to all who have used them. By the use of the poison for prairie-dogs, that animal has become nearly extinct in districts where before it was very abundant and destructive. While similar results are scarcely to be expected in the case of the gopher, owing to its peculiar life and distribution, it has been greatly reduced in numbers in localities where formerly abundant, and diligent land owners have found it possible, by use of this poison, to keep their fields practically free from its inroads on crops.

The following extracts from the correspondence of our patrons show the estimates placed on the poisons as used by them:

J. V. A., Medicine Lodge: "The batch you sent me worked to perfection."

W. H. E., Alton: "I am surprised at the result attained with so little effort."

F. H. W., Ness City: "The prairie-dog poison is ahead of all and everything else that we have tried."

J. C. B., Ogallah: "We have about made a complete success of killing Prairie-dogs."

J. C. S.,—"The prairie-dog poison furnished by the Experiment Station beats all other preparations I have ever tried. It is a sure killer, if properly used."

W. L. N., Wilson: "Used two gallons this afternoon, and can now pick up the dogs by the header-box full."

C. S. M., Sun City: "We used the Poison, and found it O. K. Thanks for your efforts in securing for the State of Kansas such a sure, dead shot."

Mrs. A. R., Goodland: "Allow me to offer my very sincere congratulations. You have done a great thing for this Western Kansas."

Owing to advances in the wholesale price of strychnine, the most expensive ingredient in the formula, the price of the prairie-dog poison is now \$2.00 per half-gallon can, and the price of the gopher poison \$1.10 per quart can, these being the quantities of the respective poisons put up by us. Full directions for use are given on each can. Lots of one to three cans will be sent wrapped in paper; above that number, they will be boxed. Small lots will go more cheaply by express, but large lots should be ordered to come by freight. There is no charge for boxing, the goods being delivered to freight or express company in Manhattan at the prices stated. The best time to poison gophers is in October and November, when they are most active; but they may also be successfully poisoned in the spring or at any time when they are working. It is not usually necessary to go over the ground with poison more than once; but unless neighboring farmers cooperate, the work will have to be attended to about once in two years.

For Mice and Prairie-Squirrels.— We have recently had considerable complaint of the destruction of young orchards by field-mice. Experimenters in the use of this poison to kill the mice have been very successful. We use the gopher poison with wheat as a bait. The poisoned wheat is eaten readily, and two or three applications will easily destroy all of the pests in an orchard. For prairie-squirrels the poison is used in the same manner, the wheat being placed near the openings of their burrows.

For Rabbits.— Corn poisoned as directed for pocket-gophers has been used successfully for these orchard pests. Kaffir-corn is also a good bait, but perhaps the most successful method of all is to use prunes, pieces of apple, or sweet-potato as a bait. Dry powdered strychnine may be rubbed on the cut surface of the bait or our liquid poison poured over the pieces.

For Rats.— Rats about barns or corn-cribs are hard to poison because they have such an abundance of food at hand; yet they will often leave unpoisoned grain to eat that which has been poisoned with our poison. While we do not claim that it will entirely exterminate rats about farm premises, we are sure that the pest can be greatly reduced in numbers by its use. As in the operations with the poison or any other form of strychnine, against all rodents living in burrows, the great majority of the victims die in the burrows and are never seen. For this reason it is not a desirable means of destroying mice in occupied dwellings. In all cases of its use, great care is necessary to avoid placing the poison or baited food where it might be found by domestic animals or persons ignorant of its deadly character.

Orders for poison should be accompanied by payment, and should state for what purpose the poison is desired. Make money orders or drafts payable to Miss Lorena E. Clemons, who is Secretary of the College. Method of shipment preferred should also be stated. The poison cannot be sent by mail, and we do not ship it outside of Kansas.

Manhattan, Kan., Sept. 26, 1906.

E. A. POPENOE, *Field Agent.*