$oldsymbol{2}$. Weed and Agricultural Seed Laws

HERE ARE two kinds of state laws which deal with weeds: weed laws and agricultural seed laws. The former is concerned with the eradication of existing stands of weeds, the latter with the spread of weeds through agricultural seeds.

These laws deal primarily with specified noxious weeds. It is often said that these are the worst weeds, but more precisely they are usually those which, once established, are notoriously difficult to eradicate. The majority are perennials which are spread by underground roots or stems and which cannot be controlled by ordinary cultivation methods. Some highly competitive annuals, capable of producing numerous, long-lived seeds, are also considered to be noxious.

AGRICULTURAL SEED LAWS

All 48 states in the United States possess agricultural seed laws, and there is also a Federal Seed Act which is concerned with the movement of seed in interstate commerce. Seed laws are concerned with the proper labeling of seed stocks offered for sale and in preventing the sale and distribution of seed injurious to agriculture.

The presence of weed seeds in agricultural seed is one of the major factors affecting seed quality, and the provisions relating to weeds and weed seeds constitute important portions of these laws. For example, the total percentage by weight of weed seeds must be given on the seed analysis label. If this percentage exceeds a certain amount (1-3 per cent in most states) it is illegal to sell the seed. In addition, legislation is directed towards designated, noxious weeds. Treatment and terminology vary from state to state; usually two or all three of the following categories are included: (1) Prohibited (or primary noxious). Sale of seed containing any seeds of the specified noxious weeds is prohibited. (2) Restricted. Sale of seed is prohibited if the number of seeds of any of the specified kinds exceeds a certain rate of occurrence (e.g. 25 per pound). If the weed seed kind (or kinds) is present in lesser amounts, the seed may be sold if the name of the weed and the rate of occurrence is properly indicated on the label. (3) Secondary noxious. There are no restrictions on sale (must comply with

requirements relating to total percentage by weight) if the weed seed and its rate of occurrence is labeled.

In general, the species considered primary noxious or prohibited are perennials with creeping roots or stems. On the other hand, secondary noxious kinds include annuals and biennials as well.

The More Important Noxious Weeds of the North Central States¹

Agropyron repens Quackgrass Agrostemma githago Corn cockle Allium canadense Wild onion Brassica spp........... Mustards Cardaria draba Perennial peppergrass Centaurea repens Russian knapweed Chrysanthemum leucanthemum . . Oxeve daisy Cirsium arvense.......... Canadian thistle Convolvulus arvensis..... Field bindweed Convolvulus sepium Hedge bindweed Cuscuta spp. Dodder Euphorbia esula Leafy spurge Plantago lanceolata Buckhorn Rumex acetosella Sheep sorrel Rumex spp. Dock Solanum carolinense Horsenettle Sonchus arvensis Perennial sowthistle Sorghum halepense Johnson grass Thlaspi arvense Pennycress

Most of the seed laws in the North Central States receive at least reasonable enforcement and some have outstanding programs. The majority of reputable seed houses properly label their stocks and do not attempt the sale of seed illegal under the law. However, most of these laws apply primarily to seed dealers and have little jurisdiction over farm-to-farm sales. Some, it is true, have farm sales provisions but these are, for the most part, poorly enforced. Since little of the seed of certain crop kinds (e.g. oats and red clover) ever goes through dealer hands, this would seem to be a major weakness in the over-all effectiveness of seed laws. Seeder box surveys have indicated a high proportion of planted seed to be polluted with noxious weed seeds.

WEED LAWS

The majority of the North Central States have weed laws or statutes pertaining to the eradication of noxious weeds. These laws vary

¹Noxious in three or more states in agricultural seed laws.

considerably in content, and the degree to which their provisions are carried out is diverse. A few of the states do not have weed laws.

In general, the Secretary or Commissioner of Agriculture is the government official responsible for over-all weed law enforcement. Local enforcement is usually carried out by the county board of supervisors or commissioners whose jurisdiction is described in the law. Ordinarily this board has the authority to appoint a county weed officer (weed commissioner, supervisor, or inspector). In some states the local administrative unit is a weed control "district" which is set up after a proper petition by a certain proportion of the landowners or taxpayers. Some laws designate certain municipal officials (e.g. the mayor) as weed inspector for his municipality.

The activities of the county weed commissioner (or his equivalent) in broad terms relate to keeping up with the weed problem in his area, locating stands of noxious weeds, and overseeing their eradication. Ordinarily control or eradication measures are recommended to the landowner who will then, presumably, carry them out. If cooperation is not forthcoming, the weed commissioner has the authority to order the weeds destroyed at county expense, the cost subsequently being charged back to the owner of the land through his taxes. Some county weed commissioners perform considerable community service beyond their responsibilities under the law; they may act in an advisory capacity in all matters relating to weed control and cooperate with extension and other personnel in setting up educational and action programs.

The weed kinds most frequently declared noxious in the North Central States' weed laws include bindweed (Convolvulus arvensis), leafy spurge (Euphorbia esula), and Canadian thistle (Cirsium arvense). The state of Minnesota has recently deleted lists of noxious weeds from its law, in effect declaring all weeds noxious. "... any weed that is injurious to public health, public roads, crops, livestock and other property may be ordered destroyed by a weed inspector."

The degree to which the provisions of weed laws are actually put into practice is varied. Some states (e.g. Minnesota) have state-wide, well administered and aggressive programs. In others the number of counties appointing weed commissioners or setting up weed control districts is not large; thus the programs are scarcely state-wide. Much obviously depends upon the weed commissioner himself and the nature of his appointment. Some county programs are less than active. In most instances the commissioner acts primarily in an advisory capacity and rarely invokes the provisions of the law.