

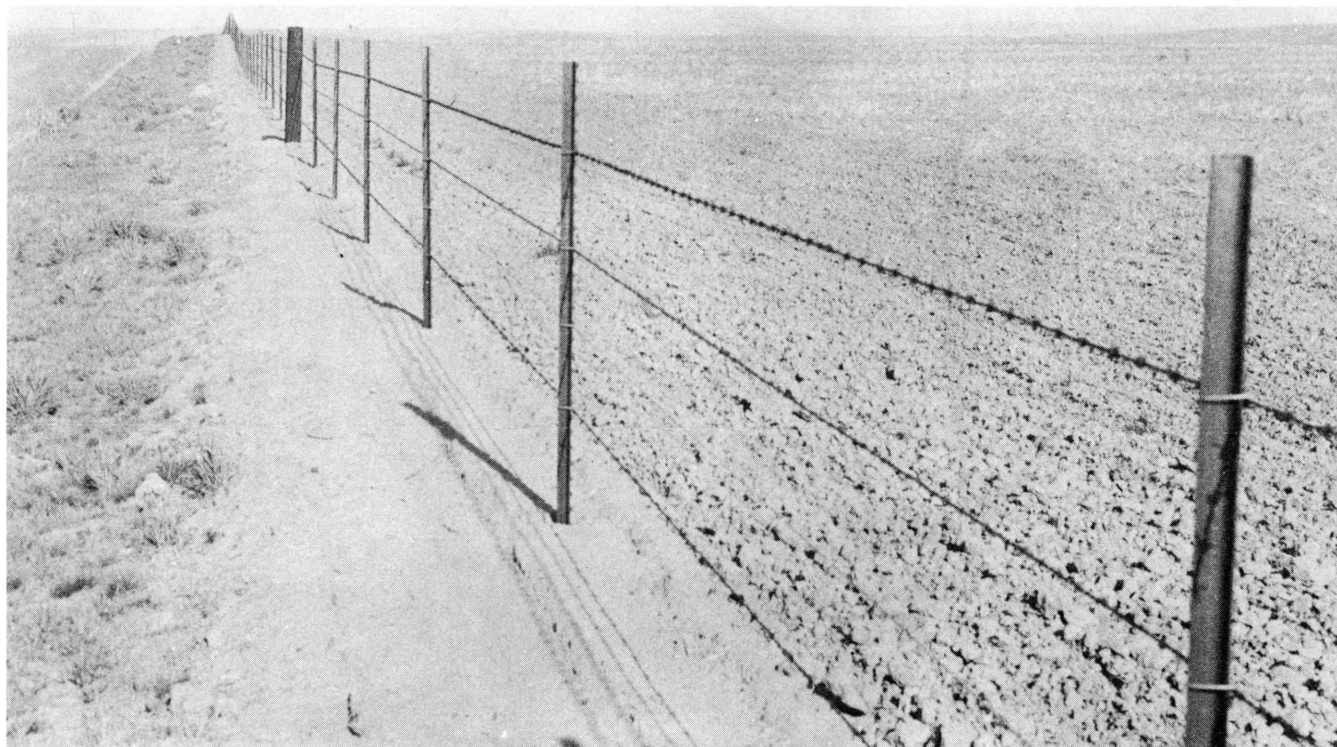
Weed Control on Highway Shoulders, Fence Rows, and Ditchbanks

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Road shoulders, fence rows, and ditchbanks are common places for the growth of many weeds. Weeds in these locations add to the cost of maintaining roads and ditches. Fence rows, road shoulders, and ditches are a source of weeds which contaminate crop and range lands.

All kinds of weeds find a home in fence rows, on road shoulders, and on ditchbanks. Some are annuals, others perennials. Some are grassy type plants, others so-called broadleaf plants. Seed of some weeds germinate with the first fall moisture; others germinate the following spring and summer. Good control of this wide range of plants requires careful selection of chemicals, as well as care in time and rate of application.

Weed seedlings of both annuals and perennials are easily controlled. After seedlings become established, heavier rates and more specific chemicals are needed for effective control. It is usually cheaper to use light rates of chemicals annually than to attempt to control weed growth for more than one year with heavier rates of the same herbicide. Patches of deep-rooted, persistent perennial weeds require special treatment. Leaflets are available on the control of plants such as field bindweed, Canada thistle, Russian knapweed, and quackgrass. The final goal in weed control on fence rows and ditchbanks is establishment of low-growing perennial grasses which prevent or suppress the growth of undesired annuals.



Fence row in Gilliam County sprayed with 4 pounds of atrazine per acre in November.
(Picture taken the following fall.)



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Chemicals to Use

Atrazine (AAtrex), simazine (Princep), diuron (Karmex), and bromocil (Hyvar X) are soil sterilant chemicals which are effective for fence row treatment and for control of weeds on ditchbanks where bank erosion is not a problem. The length of time the soil will remain sterile depends on the rate of application and the annual amount of moisture in the area treated. These chemicals are effective at light rates (2-4 pounds per acre) in the control of seedling plants.

Amitrole (Weedazol, Amino Triazole, Cytrol, or Amitrole T) is a foliage-active chemical. It kills plants by contacting the growing areas. Combination of amitrole with soil sterilants is recommended when there is active plant growth in the spray area at the time of treatment.

Fall germinating weeds, such as cheatgrass or winter rye, are readily controlled with 2 to 4 pounds of atrazine, simazine, diuron, or bromocil per acre. The 4-pound rate of these chemicals kills the less hardy summer annuals, such as Russian thistle, lambsquarter, and China lettuce.

Sandbur and other summer annual weeds are more tolerant of herbicides. The best weed control is obtained by applying 6 to 8 pounds of atrazine or 4 pounds

of bromocil plus 1 pound of amitrole per acre. Application should be made during late January and February. The rate of treatment can be reduced approximately 50% when retreating the following year.

Soil sterilants are excellent for use in the preparation of fire breaks. The same rate used for road shoulders and fence rows is recommended.

Soil sterilant chemicals must be used carefully in areas to be seeded to perennial grasses. Sterilant chemicals should not be used within one year of the time the grasses are to be seeded; the length of time prior to grass seeding will depend upon the application rate of the chemicals used. Annual plants invading such unsprayed areas prior to seeding perennial grasses can be controlled with 1 pound of amitrole per acre. Amitrole does not have residual effects in the soil. Broadleaved weeds invading areas after grass seeding can be controlled by spraying with 2,4-D. Grass seedlings should be well established, usually 6 to 8 weeks old, before applying 2,4-D.

Atrazine, simazine, diuron, and bromocil are wettable powders and require constant agitation for good application. Sprayers with good mechanical agitation are preferred over other types of sprayers.

Summer Weed Control

Weeds can be controlled with nonresidual chemicals. Effective chemicals for summer applications are (1) Dalapon or amitrole plus ester of 2,4-D and (2) MSMA (Dacnate, Transvert, and Anser). Amitrole is recommended at 4 pounds (8 pounds of 50% dry powder or 2 gallons of Amitrole T) per acre. Dalapon generally is used at 10 pounds of 85% dalapon per acre. Weeds not controlled with amitrole or dalapon are killed with the addition of 2,4-D. Four pounds of active MSMA is recommended per acre. Best weed control is obtained if MSMA is applied when temperatures are above 70° F.

The chemicals can be applied with 20 to 100 gallons of water per acre. The lower rates are effective when

boom sprays are used. Higher rates are needed for hand spraying.

Apply chemicals in the spring after most weeds have germinated but prior to blossoming of the weeds to be controlled. It may be necessary to make retreatments one or more times during the year. Precautions must be taken to avoid drift of chemicals to susceptible crops.

Weed control in fence rows, fire breaks, and along roads and ditches is not an expensive farm operation. One acre is an area 8 feet wide and one mile long. The area requiring treatment comprises very few acres of land on the average farm.