

Tillage During a Drought

WHAT TO DO – AND NOT TO DO – WHEN SOILS ARE DRY

GENERAL GUIDELINES

The best advice on tillage during a drought may be: avoid it. When soils are dry, you should do everything you can to conserve remaining moisture. This may mean holding off on plowing, disking and cultivating so as not to disturb soils and let moisture escape in the process. Keep in mind that any operation that brings soil up to the surface may worsen conditions.

The guidelines at right offer some general considerations. For advice specific to your crops and drought conditions, contact your county Extension agent.

- ◆ *Minimum tillage.* Try to use minimum tillage techniques if possible. These will leave crop residue from the preceding year on the surface, thereby reducing evaporation of moisture from the soil. Conservation tillage may be a particularly good method because it leaves more than 30 percent of the residues, such as old cornstalks, in fields after planting.
- ◆ *Weed control.* Use chemical weed control, rather than tillage, to manage weeds. With chemical weed control, you avoid disturbing the soil and causing moisture loss.
- ◆ *Planting.* While it helps to plant in the moist soil below the dry surface, don't plant beyond the maximum recommended depth for your crop.
- ◆ *Tilling.* If you must till, keep it at a shallow level. For example, when field cultivating, use a depth of 2 to 3 inches, rather than 4 to 5. Do not subsoil.
- ◆ *Chisel plowing.* If using a chisel plow, use sweeps instead of twisted shovels on it. The sweeps bring up less soil, while leaving more crop residue on the soil surface. As a result, less moisture is lost from the soil.

Additional resources:

Your county agricultural agent

Related publications:

UW-Extension publications–

“Planting for Conservation Tillage,”
(A3396);

“Row Crop Cultivators,” (A3483);

“Optimum Corn Planting Practices,”
(A3264);

“Conservation Tillage for Corn,”
(A3091);

“Making Conservation Tillage Work for
Corn Production on Your Soil Type,”
(A3386);

“Managing Drought-Stressed Corn and
Soybeans,” (NCR238).