Spray crews don't have to work in spray mist all day with the low-diesel application. Accutrol nozzles keep small particles from floating around. Also note the white marking makes for easy visibility (above left). The dead ash (right) was sprayed in 1972 near Charlevoix, Mich. Spray mix was two gallons Banvel 510, one gallon Accutrol, 15 gallons oil and 82 gallons water.

Dormant Brush Control With Less Oil

THERE IS A WAY to get around the fuel oil shortage for dormant spraying.

By substituting an air emulsion spray system and an oil soluble formulation of the herbicide, you can reduce the number of gallons of fuel oil per 100 gallons of mix from 96 to 15.

Here's how it works.

The chemical coordinator of one utility line says it has saved 200,000 gallons of fuel oil and transformer oil by using this system. "Previously, we used 4 gallons of 2,4,5-T and 96 gallons of fuel oil per 100 gallons of mix," he says. "This season, we substituted 2 gallons of Banvel 510, the oil soluble formulation mixed with 2,4,5-T, and 1 gallon of Accutrol for part of the oil. We found we needed only 15 gallons of oil per 100 gallons of mix, with the remainder of the formulation being water. We have worked a special technique to avoid freezing problems."

Explains Chuck Middleton, at Velsicol Chemical Corporation, "The Accutrol air emulsion system allows the 82 gallons of water in the new spray combination to mix with the 15 gallons of oil.

"Also, Accutrol has drift control properties. But more important in low-oil, modified cane work, it helps the chemical penetrate the surface of the bark."

Middleton points out that it's important to spray two-thirds of the stem. The low-oil, modified cane system was first tested in 1969 and used commercially in 1970.

This application has other advantages, though, besides getting around the fuel oil shortage:

1. It's better for the environment. "Reducing the oil content means the grasses aren't burned down as long," says Middleton. "With regular basal work, grasses do not grow back, sometimes for two years or more."

2. The low-oil, modified cane application is safer for the spray crews. "There is a safety factor to consider with the conventional amount of fuel oil," cautions Middleton. "Spray applicators should be warned about smoking around the spray when the temperature gets much above 80°F., and when the humidity is 50 percent or under. Reducing the amount of oil means there is less hazard."

3. The low-diesel, modified cane spray is more comfortable for the crews to use. Large droplets are produced by the Accutrol nozzle," notes Middleton. "Crews don't have to work in the solid mist all day. Even with the low-oil, modified cane application, a spray crew gets some oil on them. But it's not like conventional dormant spray where the men go home and their wives make them change clothes in the garage."

4. The visibility of the Accutrol system lets you see where you have sprayed. "What most utilities like best about this application is the white marking made by the mix," says Middleton. Dormant spraying is perhaps more critical than foliage, in that you have to work harder to get the proper coverage. You have to make sure you get on both sides of the stem, one way or another.

"One problem with regular dormant spraying is knowing when you have the right amount of coverage — usually when the oil begins to run down the stem. You also have to have coverage on the crown and around the base of the tree where the dormant buds ready to sprout are located."

Economically, the low-oil, modified cane application is slightly less costly than conventional spray. But with the added advantage of safety and comfort for the spray crew, less environmental effect, and better spray coverage, many utility companies may decide to stick with the low-oil, modified cane application even if the availability of fuel oil does improve. □