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AUG 6 1974

Cloud Seeding Could Save Crops

AS the present drouth intensifies, people ask: "How about starting those cloud seeders?"

Two reasons apply in most cases. One is that less than a fifth of Oklahoma is covered by cloud seeding projects and hardly any of adjacent states. The other reason is that clouds for seeding are scarce, and our springtime opportunities are gone.

Although the Oklahoma wheat crop was reduced by 27 million bushels from the record harvest forecast earlier, our state fared better than others. The Texas harvest was cut by more than a third and Kansas fell short of estimates by 75 million bushels at $4 each.

Total outlay for cloud seeding in Oklahoma during the past year probably was less than $100,000 but evidently it added millions to farm income in wheat production. Drouth set in anyway, because it is now a regional malady and most people still prefer to hold onto their dimes and lose their dollars to dry weather.

This is the official government attitude. A drouth disaster official at Dallas said he doubted that the Federal Disaster Assistance Administration (FDAA) would do much to help cloud seeding because results in 1971 didn't amount to much. The truth is the government didn't do much cloud seeding in 1971, but it handed out $150 million in cash grants and loans. It will do the same this year.

Anyway, dry weather has set in and we have to come from behind to get back in the game. Opportunities for doing this on a general scale probably won't appear until fall rains begin in September. Chances are we won't be ready with a big program then.

Another question often asked is: "When you increase precipitation in one area, do you decrease it in another?" A complete answer is technical and lengthy, but the answer is no.

Dr. Irving P. Krick, internationally known weather modification expert, explains that cloud seeding stimulates rainfall and then natural processes take over to keep normal precipitation going until the cloud or storm system runs its natural course.

Cloud seeding functions primarily by providing nuclei for formation of water droplets or ice crystals in cold clouds. Silver iodide will function at warmer temperatures than natural nuclei and therefore will operate in clouds at lower altitudes.

As nature takes over, Krick says, instead of limiting rainfall to the target area, there is probability that other areas downwind will benefit. Krick also points out that rainfall patterns under cloud seeding tend to be more uniform, with smaller sized water droplets, and that severe weather phenomena, such as hail and tornadoes, can be reduced in intensity.

Cloud seeding should not be expected to deliver, in every case, as much rain as the wettest year on record, or perhaps an "average" or "normal" year, which fluctuate widely.

For example, in a wet year, a control area might show 125 per cent of normal rainfall and a target area, where seeding is done, might produce 200 per cent of normal or average. But in a dry year, a control area might receive only 25 per cent of average and a target area might receive 50 per cent of average.

Still, the cloud seeding would be doubling the amount of rain in a dry year, and that could be the difference between saving a crop and losing it.