## Baled Clouds: New Way To Prevent Drouth

By Dieter Krieg

DRY GULCH, PA. — The old cliche that man can talk about the weather but is incapable of doing anything about it is no longer true, thanks to a 31-year old Pennsylvania dairyman who is gifted with a special knowledge of physics and chemistry. As long as there are clouds in the sky, there'll be moisture for Paul Wolkenkratzer's crops. In fact, even when there are no clouds around. Wolkenkratzer can produce rain with specially-treated, compressed clouds which he stores in a 30 x 150-ft. trench silo. It's a scientific breakthrough with immeasurable potential for food-producing areas of the

The young man's method to overcome a severe drought such as many farmers experienced last year is to bale clouds and preserve them for future use.

Inviting me to follow him to the machinery shed, Wolkenkratzer offered to show the equipment he uses to harvest clouds, or as he put it: "milk the sky." There's nothing extraordinary about any of it, although the two hot air balloons he uses to lift the equipment are a bit unusual.

A 46-horsepower utility tractor and a common baler do the job of compressing clouds into bales of stored moisture. No special gadgets or attachments are needed, except for a chemical dispenser-applicator which sprays a preservative onto the clouds as they enter the baling chamber and a rod which serves as a powerful electrode to ionize the cloud particles. That instrument is powered by the tractor's 12-volt electrical system. An ordinary ignition coil builds the voltage up to 25,000 volts, which is sufficient to cause molecular bond-

Other than for a change in the type of nozzles used, and their position within the baler, the applicator is the same as those used to apply preservatives while baling hay, Wolkenkratzer explained. A fine mist of the special chemical and the ionization process is all that's necessary to transform the clouds into a preserva-

While the young inventor speaks openly about the mechanics of his stunning project, he's reluctant to discuss too much about the chemistry involved, claiming that he would like to patent the formula and market it.

The inspiration came to him while he was aboard a jet last summer on his way to the Holstein Convention in Nashville. "I looked out the window and saw all those endless fields of clouds out there. It was beautiful. For as far as I could see there were white clouds bathed in sunlight. They were sculptured into huge pillows and blankets and castles and whatever you might want to imagine. I fantasized that I was walking out there in the deep, downy-soft canyons and along ridges and cliffs of an awe-



Above, Wolkenkratzer returns from a productive day in a field of clouds. Baling clouds and storing them in case of drought is the result of his dream to do something about the weather.

inspiring, heavenly world. It looked so inviting!

"That's when it hit me. Nobody could walk and bounce around on clouds, of course, but I wondered what if they could be transformed into something more solid?"

Asked if it took any special license to fly the balloon, Wolkenkratzer answered that he did have to pass a flight test and acquire a permit. The Federal Ballooning Bureau (FBB) is still considering legal questions and weight standards concerning the unusual cargo carried by Wolkenkratzer's two balloons. "It does take quite a bit of hot air to get enough lift on this," the dairyman-inventor admitted. He uses a high-intensity propane burner on the balloon which carries the baler and a normal burner on the tractor-carrying balloon. "The front balloon doesn't need the high-intensity burner because I funnel the hot exhaust gases from the tractor into it. That helps," he explained. He controls his balloon from the tractor seat. A second man is required to steer the balloon that carries

FBB regulations permit Wolkenkratzer to ascend to a height of 10,000 feet, which is well within reach of the most productive clouds. He says he does most of his cloud baling directly above his own 150-acre farm. He just floats around a bit and lets the clouds drift into the baler. "That's the easiest way because I can just let the bales drop down to my field," he said. For a real challenge I turn on the kicker and try to aim the bales to fall right into the trench," he continued. "That's about like trying to throw a pingpong ball from mid-court to make a basket," he chuckled.

The bales of cloud material are extremely light, considering their density, Wolkenkratzer showed. When ejected from the baler, they float to the ground like big, fluffy, feathers. "If the wind is right, I can bale clouds miles away from home and let the bales float to my property. But that's pretty tricky business. I'm thinking of getting a third balloon to take a wagon up with me," he confided. That would add an additional expense to the elaborate system, but he thinks it's cheaper than conventional irrigation.

The baling process is remarkably fast because nothing can choke up and there's no need for twine. The compressed cloud material stays together by itself, Wolkenkratzer showed. On a good day, he can bale close to 2000 bales an hour. Each bale, he says will yield between 500 and 600 gallons of water, depending on their density. "I'll have enough to keep me supplied all summer even if we don't get a drop of rain," the young man said confidently.

To get all that water, Wolkenkratzer transports his bales out to the fields which need moisture and sprinkles them with small amounts of dry ice. (Salt particles or silver iodide may also be used. Any of these materials are commonly used in cloud seeding to produce rain in droughtstricken areas.)

"This works only on sunny days," Wolkenkratzer cautioned, "because sunlight was squeezed out during baling and needs to be replaced to form the original cloud. You might say it's sort of like adding water to powdered milk.'

Under the right conditions the compressed cloud swirls to "life" and spreads across the field, releasing its cargo of rain. "The beauty of it is I can have rain when I want it, where I want it," says a smiling Wolkenkratzer. "I can make it rain on one field, while I bale hay on the next. It's

Earlier this year on Wednesday, April 1, Wolkenkratzer demonstrated his ingenious invention to a gathering of weathermen in Washington,

"They've told so many lies over the years about when it is or isn't going to rain that I jumped at the opportunity to score a point for our side just once!" Wolkenkratzer concluded.

EDITOR'S NOTE: If your initial reaction to the above story is "I don't believe it," you are 100% right. Paul Wolkenkratzer and his cloud-baling concept for overcoming severe drouth are simply the figment of Dieter Krieg's imagination. Dieter, editor-publisher of Farmshine Newspaper, Mannheim, Penn., wrote the spoof story for his paper's April 1 (April Fool's Day) edition. Our thanks to Dieter and Farmshine for tickling our funnybone.