Now-mechanical harvesting for broilers

Mechanical harvesting of broiler chickens produce more high-quality carcasses at substantial economic savings and is more humane than hand catching

This is the finding of a University of Maryland Agricultural Experiment Station agricultural engineer studying mechanical alternatives to the traditional methods of hand-catching and loading broilers

Assistant professor Ali Farsaie and his colleagues designed and tested two mechanical devices for catching and loading broilers in response to the growing desire for methods that are less costly, less damaging and that require fewer men than the

traditional Currently broilers are caught and loaded into chicken coops by hand.

In one test, broilers were caught by scoop on a frontend loader An average of 55 broilers were caught with the scoop and carried to the bed of a live-haul truck There, they were gently removed one by one and placed in chicken coops

Another group of broilers were gently picked up by hand and placed into crates inside the broiler house Eighty-eight crates were caught by the front-end loader method and 84 were caught by hand The broilers sustained less bruising from the "scoop" method than they did by the traditional method

In the other test, broilers

attached to the front-end loader and then dumped onto a long conveyor They moved along the conveyor to the truck, where they were hand-loaded individually

One hundred crates of

were caught by the scoop broilers were loaded using this method, while another 104 crates were loaded by hand Again, the broilers sustained less bruising from the scoop and conveyor method than they did by the traditional method

The mechanical broiler

harvesting system - which is still under development - will require nine men, two less than the normal 11-man crew used in traditional hand-catching procedures. Farsaie estimates that about \$11,000 per man will be saved annually

Furthermore, less bruising will produce a

corresponding increase in the number of Grade A broiler carcasses, Farsaie says This development would increase profits by about \$22,500 per year for one operation alone and would save the Delmarva poultry industry an estimated \$1,940,000 per year

USDA to monitor for potato nemitode

LONG ISLAND, NY -Areas on Long Island and in upstate New York infested with the golden nematode, a destructive pest of potatoes, will be getting increased safeguards against contamination of soil and water by certain pesticide treatments say U.S. Department of Ag alture officials

The golden nematode damages potatoes by boring into the roots and robbing the plants of water and nutrients It occurs throughout most of the Old World and South America, but only in isolated areas in North America In the United States it is found only on Long Island and in a small area in upstate New York, centered in Steuben county Aggressive state and federal regulatory and control programs have so far prevented its spread to other U.S potato-growing areas

According to Glen Lee, staff officer in USDA's Animal and Plant Health Inspection Service which administers the federal programs, an environmental monitoring system is being set up to determine what residue levels, if any,

remain in soil and water following treatment

"We'll be taking soil and water samples both before and after the treatments,' said Lee, and we'll continue with followup sampling at prescribed time intervals Water from wells and ponds and other impoundments, and soil from various depths will be analyzed

The New York Department of Agriculture and Markets and the manufacturers of the chemicals are cooperating in setting up the program, which is expected to be ready in time for the coming year's treatment season All data obtained will be available to the public





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Chicken maturity

(Continued from Page D9) the reproductive system is stimulated '

Sure enough, closer examination of the chicken showed that its testes were huge, about the size of a chestnut, compared to the normal kidney-bean-sized

Still, the bigger surprise came when the researchers were able to milk the nineweek old male for semen Normally, semen production does not begin until broiler breeders are about 20 to 24 weeks old and weigh about 400 grams The chickens that had

undergone the operation weighed about one-fourth of that (1,200 grams) "and it seems that the ones Ms Mass cut are going to remain lighter in weight throughout their development," Kuenzel said

"I was surprised," he said "The operation apparently stimulates the onset of reproductive brings them to sexual

development much sooner than normal

Just why this is so is a question Kuenzel is studying right now "We're trying to determine much fiber tracks (connections that carry messages from one nerve cell to the next) in the brain were severed," he said "They are patterned through the brain, so, hopefully, we can identify which ones were cut by the surgery Right now, we don't know

The implications of the research are promising With sexual development coming much earlier than normal, roosters can begin breeding much earlier; potentially more chickens can be produced

The operation also appears to offset the problem of unwieldy size among roosters as well as avian leg weakness brought about, in part, by that size The smaller roosters are fully capable of producing sperm,

development of their yet are not so big as to have system-it difficulty inseminating the hens ATTENTION **DEUTZ ENGINE OWNERS** If your old Deutz engine is too tired to make it thru the winter -HAVE IT REBUILT - We rebuild about 100 Deutz engines per year. All models We recondition everything, including starter and generator. Small diesels can be rebuilt in one day. We also stock some rebuilt exchange engines for same-day change over. **OUR REBUILDS CARRY A SIX MONTH** LIMITED WRITTEN WARRANTY

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1,500	5'4''	9'0''	7	1,388	470.00
2,000	5'4''	12'0''	7	1,735	570.00
3,000	5'4''	17'11''	7	2,432	770.00
4,000	5'4''	23'10''	7	3,130	950.00
5,000	8'0''	13'7''	1/4''	4,484	1,540.00
6,000	8'0''	16'2''	1/4"	5,123	1,690.00
8,000	8'0''	21'6''	1/4''	6,475	2,095.00
10,000	8'0''	26'10''	1/4''	7,825	2,495.00
10,000	10'0''	17'0''	1/4''	6,956	2,250.00
12,000	10'0''	20'6''	1/4''	8,074	2,630.00
12,000	10'6''	18'7''	1/4"	7,900	2,525.00
15,000	10'6''	23'2''	5/16''	11,857	3,825.00
20,000	10'6''	31'0''	5/16''	15,105	4,790.00
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