

Play It Again, Zita

(Continued from Page A1)

nitely and reactivated for cell growth to allow the Wiles to reproduce Zita far into the future.

Ovaries from slaughterhouse cows provide the egg for the cell. This egg is emptied of its genetic

information, the chromosomes. An electric shock fuses the cell with the egg. Within a few hours the embryo begins to divide. In seven days the cloned embryo is ready for transfer into a recipient cow.

The embryos were shipped

overnight to the farm and implanted in the prepped cows and heifers.

"For the first one we probably overdid it a little, we had probably 40 cows in heat for 10 embryos," said Wiles. Ultrasounds were conducted at 35, 70, 90 and 120 days. "They're not out of the critical stage in cloning until 120 days."

The calves were born Feb. 7

and 13 at the New Bolton Center. Since their assisted delivery, the calves have been under close watch.

After being monitored for three weeks after their birth, they came home to Williamsport — the first cloned calves to be returned to the farm, according to Wiles. Although other cloned animals were born earlier, they are still in the laboratory.

Cloning Considerations

"The cloning industry is in its infant stages, there's only a handful of registered Holstein calves and one registered bull. The neat part about cloning dairy animals is that we can see the production comparisons.

"We had Zita production tested and evaluated for type by the Holstein Association, so when these mature and calve in we'll be able to compare type or milk production per year and see how close they really are."

More calves are expected in August and another seven embryos were put in last week. To get Genesis and Cyagra, 12 embryos were transferred.

Because this is cutting-edge technology, the price tag may be prohibitory for widespread use.

Figuring in the cost for scientists to develop the embryo, the expense for care of the recipients, and fee at New Bolton for delivery, care, and bloodwork, Genesis and Cyagra come with a price tag of between \$40,000-\$50,000 apiece, approximates Wiles.

In coming years, said Wiles, cloned embryos will be more widely used in America and even shipped overseas as producers gain the technology and experience of transferring the embryos themselves without scientists and laboratories, keeping costs lower.

"There's a lot of activity around the country to get cows signed up, especially older cows. Producers can preserve cells now and work on cloning later if, five to ten years down the road, costs decrease, and they can look at that a little more."

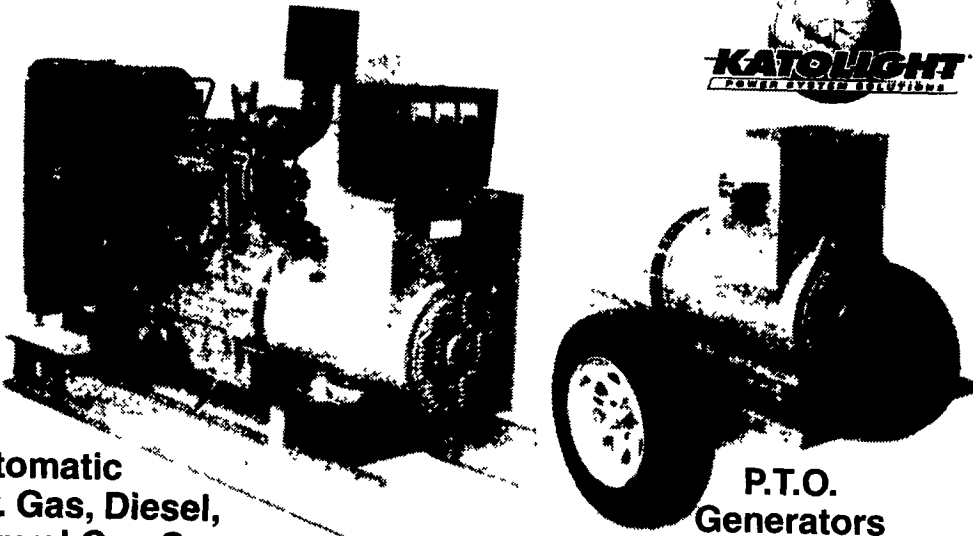
The cloning option was especially appealing to the Wiles because Zita did not flush well. "There's still a gigantic pile of embryo contracts not fulfilled," said Wiles, who is hoping the clones step in and fill the gap that she left.

"These calves can start where Zita left off — expand on what she did through her daughters.

(Turn to Page A46)

Agricultural Generators

Spectrum Detroit Diesel



Automatic
L.P. Gas, Diesel,
Natural Gas Generators
5 to 2,000 KW

P.T.O.
Generators
25 to 135 KW Units
In Stock!

Service - Rental - New & Used Units In Stock

PENN POWER SYSTEMS
Power Generation Systems Specialists

330 Fonderwhite Road, Lebanon, PA 17042
Call Leonard Martin 717-273-4544
Fax 717-273-5186

Angus Foundation To Host First Ever Golf Tournament

THORNTON, Colo. — Angus enthusiasts: don't forget your golf clubs while packing the trailer for this year's National Junior Angus Show. The Angus Foundation is excited to host the first ever Angus Foundation Golf Tournament, held in conjunction with the National Junior Angus Show, on Tuesday, July 10.

The tournament will be at the Thorncreek Golf Course, one of Colorado's top 10 courses in Thornton, Colo. The day's activities begin at 6:30 a.m., with a continental breakfast, followed by a shotgun start at 7:30 a.m. Teams of four will compete for various prizes. The golfers will form four person teams before the tournament. If an individual

is not part of a team, he or she will be put with a team. A hole-in-one prize is on the line. Mulligans will be available for a minimal fee, with a limit of one per golfer.

A Certified Angus Beef® lunch will be served following the tournament to recognize the participants and sponsors and to make special awards.

Several sponsorship opportunities are available including event sponsor, golf cart sponsor and hole sponsor. Sponsorships include recognition in the Angus Journal, Tournament program, signage at the event, and complimentary registration for one to four golfers, depending on the level of sponsorship.

MY-D HAN-D

BALE ELEVATORS-CONVEYORS

formerly Graves

- ✓ 1" square 17 ga steel tubing used throughout (side panel tubes and bale floor tubes)
- ✓ Every panel X-Braced with 1/4" round steel
- ✓ Ball Bearings used throughout.
- ✓ No 55 Chain with bale spikes every 18 inches



BASIC ELEVATOR is 18' long 24" wide and comes complete with Speed Reduction and Motor Mount. Elevator can also be used as a self powered mow conveyor. Inclined elevators are self supporting up to 54'.

BASIC CONVEYOR is 18' long 24" wide and drives from top elevator shaft. Comes complete with Roller Chain Connector Drive Bale Guides and Connector Plates. Can be quickly connected to or disconnected from elevators.

FULL LINE OF ACCESSORIES include 6 to 9' midsection for additional length of either unit.

★ MADE IN USA BUY AMERICAN ★

PORTABLE ELEVATORS

formerly Speed King



★ ALL ITEMS IN STOCK ★

POUND FOR POUND, DOLLAR FOR DOLLAR MY-D HAN-D GIVES YOU MORE

MY-D HAN-D BUILT LIKE YOUR FARM DEPENDED ON IT.

Call For Information & Dealer Nearest To You!

Products of...

RYDER SUPPLY CO.

539 Falling Spring Road
P.O. Box 219
Chambersburg, PA 17201-0219
888-464-6379
Fax (717) 263-5573

See
Lancaster Farming
CowCam
Visit our Website
at www.lancasterfarming.com



Hostetter Management Company

Has Swine Finishing Floor Contracts Available For Individuals Interested In Building Finishing Barns In Pennsylvania. If Swine Production Is Of Interest To You, We Are Offering Opportunities To Become Part Of A Growing

PA Swine Management Company.

For details and cash flow information contact:
Francis Strause (717) 286-7472

Hostetter Management Company

717-721-9127
Fax 717-721-9128
120 Lake St.
Ephrata, PA 17522

