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As Wild Horses Breed, a Voice for Contraception

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Anne Sherwood for The New York Times

POPULATION CURB Contraceptive darts were used on horses at the Black Hills Wild Horse Sanctuary in South Dakota.

By JIM ROBBINS

Published: April 20, 2009

HOT SPRINGS, S.D. — The long-simmering controversy over what to do with America's wild horses has come to a boil again.

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Anne Sherwood for The New York Times

A GOAL Jay Kirkpatrick has pushed contraception for the federal government's wild horses, to no avail. He sees cultural forces; officials cite logistics.

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Last summer federal officials said they had so many wild horses in captivity — about 34,000 and growing — that they wanted authority to euthanize them, and some states are considering slaughter. It costs \$27 million a year to care for the animals, according to the [Bureau of Land Management](#), which oversees the wild horse program.

In February, Representatives Nick J. Rahall, Democrat of West Virginia, and Rep. [Raúl M. Grijalva](#), Democrat of Arizona, introduced federal legislation to prevent slaughter.

The real answer, according to Jay F. Kirkpatrick, director of the nonprofit science and conservation center at ZooMontana in Billings, is an immunocontraceptive called P.Z.P.

"There's more than 30,000 wild horses on the range out there, and they are reproducing," Dr. Kirkpatrick said. "The

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THE NEW YORK TIMES

WIN FIVE





Anne Sherwood for The New York Times

NEWBORN A two-day-old foal is checked by its mother. The owner of the refuge wants to reduce the number of births so he can take in more horses.

real problem isn't what to do with excess horses, it's reproduction. What do you do with excess dogs and cats? You spay and neuter."

Dr. Kirkpatrick, 69, has been using the [birth control](#) drug porcine zona pellucida, or P.Z.P., since 1988 to control horse and deer populations. He has been promoting its use for the federal government's wild horses of the West for

almost as long, with no luck yet.

Dr. Kirkpatrick has one view of why it is not more widely used. "The problem isn't scientific, it's political and cultural," he said. "We're dealing with a cowboy culture. One told me, 'We don't do it this way; we do it on horseback with ropes.'"

The Bureau of Land Management has another view. It does use the contraceptive on some 2,200 horses, but says the technique has limits. "In its fluid form, it's only good for a year," said Tom Gorey, a spokesman for the bureau's Wild Horse and Burro Program in Washington. "We only gather the herds every four years, so that's a problem.

"If there was a fertility control out there, we'd love to have it," Mr. Gorey added.

Wild horses, he said, are scattered all over the West, and tracking them down for annual treatment is impossible. "We're not Assateague Island," he said, referring to the small, contained wild horse refuge in Maryland.

When the Maryland portion of Assateague Island became a national seashore in 1968, there were 28 horses. The population grew to 166 by 1994, when the [National Park Service](#) asked Dr. Kirkpatrick to start a program to reduce fertility with P.Z.P. The number of horses peaked at 175 in 2001 and has since dropped to 130.

While other approaches to birth control or sterilization are hormonal or chemical, P.Z.P. is an immun contraceptive that creates [antibodies](#) that do not allow the sperm to attach to the egg.

In two days in March here on the private [Black Hills Wild Horse Sanctuary](#), Dr. Kirkpatrick shot 140 horses with contraceptive darts from a compressed-air gun. With each shot the horse would jump, as if stung, and quickly resume its grazing. A booster shot a month later should preclude 95 percent of the mares here from having colts for the next few years. Combined with a 5 percent mortality rate, that should stop the growth of the herd through reproduction.

Dayton O. Hyde, owner of the refuge here, wants to limit the birth rate so he can take in more horses. "The days when wild horses could run wild and free over the West are gone," Mr. Hyde said. "The reality is we need to cut down the number."

But Ginger Kathrens, a documentary filmmaker who has chronicled wild horses and is an advocate for them, believes P.Z.P. should not be used in wild herds because in some horses it only delays birth. "It causes out-of-season births," Ms. Kathrens said. While horses in a refuge can be cared for, wild horses that give birth in the fall are at risk because of harsh weather. "It's a life-threatening situation," she said. "It's cruel to watch a mother try and nurse a foal in a blizzard. They suffer, and some of them die."

Numerous studies published by Dr. Kirkpatrick and others in wildlife research journals demonstrate that P.Z.P. is effective in everything from elk to kangaroos. P.Z.P. is also being used on deer that crowd urban and suburban areas. In a [study published last year in Wildlife Research](#), two researchers using P.Z.P. on deer at the [National Institute of Standards and Technology](#) in Gaithersburg, Md., wrote that over a nine-year period, the birth control reduced numbers by nearly 60 percent.

"We've solved the technical problem for the issue of deer in cities, towns, suburbs and parks," said Allen T. Duthart, a research assistant professor at the Cummings School of

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parks," said Allen T. Rutberg, a research assistant professor at the Cummings School of Veterinary Medicine at [Tufts University](#).

Quentin Kujala, bureau chief of the wildlife management division at the Montana Department of Fish, Wildlife and Parks, said his agency had not used P.Z.P. for a few reasons. One is that some urban deer are in an "open" system and have ready access to the wild and wild deer, and it is hard to know which have been treated and which have not. The deer in Maryland are in a closed system.

There are philosophical questions as well. "It's also a question of how we look at wildlife," Mr. Kujala said. "When you give an animal a drug to control breeding, isn't that a step from wild animal to animal husbandry?"

Still, some say it is better than hunting deer in city limits. Dave Pauli, a regional director at the [Humane Society of the United States](#), says P.Z.P. is important. "It's a tool in the toolkit," Mr. Pauli said. "But it only reduces deer, so you still need such things as deer-proof shrubs and tennis balls to throw at them."

Dr. Kirkpatrick and others make the P.Z.P. themselves, using pig ovaries, in a laboratory on the zoo grounds in Billings. It is time-consuming and laborious, but no one has found a way to synthesize it. It costs \$21 per dose and \$2 for the dart.

At Assateague Island, Mr. Zimmerman estimates it costs \$35,000 a year to treat the horses, including staff time.

A version of this article appeared in print on April 21, 2009, on page D3 of the New York edition.

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