## THE PEACEABLE KINGS ON MANAGEMENT OF THE PEACEABLE AND MANAGEM



A BEAUTIFULLY RESTORED NEWPORT FARM IS THE SITE FOR A BOLD PROGRAM TO PROTECT AND PRESERVE RARE AND ENDANGERED BREEDS OF FARM ANIMALS



he walls are stuccoed; the roof, of cedar shingles hand-cut, then steamed and molded to give the effect of thatch. It

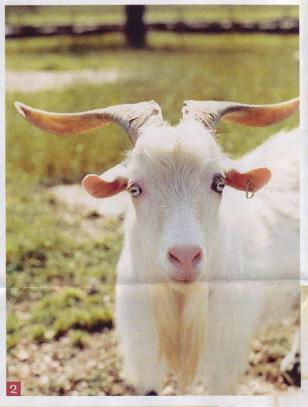
is, far and away, the most elegant poultry house I have ever seen. Obviously, the wild hen turkey agrees: with a fake and a dodge, she slips past Joe Jones, facilities manager at Swiss Village Farm, and in through the door to captivity. Thanksgiving is coming, I reflect, but Jones assures me he will roust the interloper as soon as he finishes my tour. A wild hen cannot be allowed to interbreed with the farm's Narragansett tom turkeys.

For, like all the livestock here, the Swiss Village Farm turkeys belong to a breed once popular on American farms but now threatened with extinction. A New England favorite until the early twentieth century, the Narragansett was eventually displaced by the mammoth-

breasted large white, the turkey favored by factory farms. The entire surviving population of Narragansett turkeys numbers fewer than 500, and the mongrelization of a single flock would be a serious blow to the breed's survival. Fortunately, though, Swiss Village Farm is taking steps to change that situation. Since the spring of 2002, the farm has been experimenting with a revolutionary kind of cryogenic library, one that offers a secure future for America's at-risk breeds.

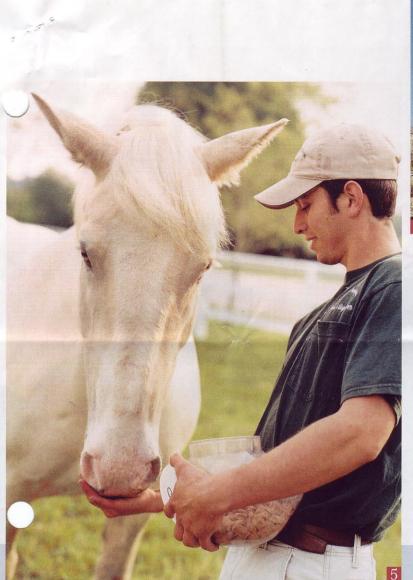
Well before the new mission was undertaken, however, this was an extraordinary place. In 1916, financier Arthur Curtiss James decided that these 30 acres inside the city limits of Newport, Rhode Island, should feed his family, the 100-member staff of his adjoining estate, and the 40 crewmen on his three-masted sailing yacht. What's





I Acres of brush and asphalt were stripped away to restore the farm's once spacious views. 2 The Tennessee fainting goat, a genetic oddity whose future is guaranteed as part of the farm's genetic library. 3 A Narragansett tom struts his stuff behind the hennery. 4 Abner, a 2-month-old Tennessee fainting goat kid. 5 Good-tempered and willing, the beautiful American Cream horse deserves a better fate than extinction. 6 Norman the steer shows off the stocky build and shaggy coat typical of hardy white Galloway cattle. 7 Who could resist this white Silkie hen, which, though not endangered, enjoys the farm's hospitality. 8 A multimillion-dollar restoration has returned Arthur Curtiss James's village to its original appearance.

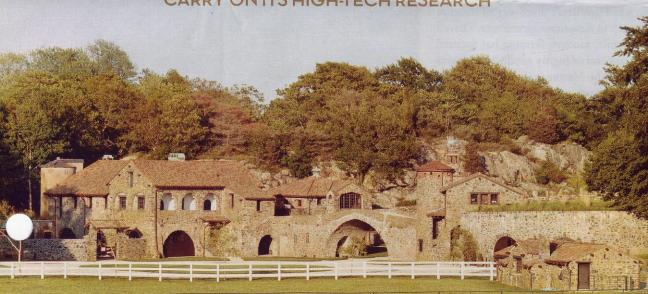


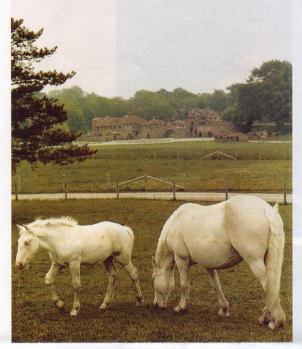






## THE RESTORATION OF THE BUILDINGS TOOK THREE YEARS TO COMPLETE. THEIR ORIGINAL APPEARANCE HAS BEEN RE-CREATED BOTH INDOORS AND OUT BY CONCEALING ALL THE MODERN UTILITIES THAT THE FARM WILL NEED TO CARRY ON ITS HIGH-TECH RESEARCH





more, they should do so with Swiss efficiency. By blasting out the heart of a hill, he created a rough-hewn court; after framing the entrance with an arched stone bridge, he lined the space with a cluster of cuckoo-clock cottages, a stable, a barn, a dairy, a slaughterhouse, even a private veterinary clinic. Dorrance Hamilton, founder of the Swiss Village Farm Foundation, remembers, from childhood visits, the farmhands dressed in lederhosen and dirndls.

y the time she purchased the farm at a bankruptcy auction in 1997, brush had swallowed
the pastures and the buildings verged on
ruins. With the three-year, multimilliondollar restoration that ensued, architects
Robert T. Crane and Madison Spencer, with the help of
project supervisor Peter Borden, maintained an appearance authentic to the original construction both indoors
and out. At the same time, modern utilities such as underground conduits for fiber-optic cables were installed.
These were essential because, in conversations with the
veterinary faculty of Tufts University, Hamilton had
begun to plan a high-tech future for the site.

The impetus was Hamilton's discovery of the dire state of biodiversity in American agriculture. Driven by the need for profit, modern farming has focused relentlessly on a handful of highly productive strains of livestock, such as the Narragansett's nemesis, the large white turkey. Similarly, 95 percent of our milk now

derives from one breed of cow, the Holstein-Friesian, and 90 percent of our eggs come from the white leghorn chicken. As a result, hundreds of other breeds are disappearing. With them, they are taking agriculture's heritage and much of the genetic potential for its future, for preserved in

An American Cream mare and her foal, above, at peace in the farm pasture. Only about 300 horses of this breed, the only draft horse native to the United States, survive.

The ambience is medieval, but the cryogenic storage facility within the bridge abutment, right,





Only minutes old, this Gulf Coast Native lamb, below, carries in its genes a 400-year heritage worth preserving. A Mille Fleur d'Uccles rooster and a Silver Seabright hen, right, share a roost. To restore the hennery, opposite page, project manager Peter Borden reinvented the process by which the roof was built. Cutting cedar shingles to shape, he steamed them until pliable, then formed them over molds fashioned from plastic pipe. Sources, see back of book.





## ALL SORTS OF REFUGEES FROM AMERICA AGRIBUSINESS, SUCH AS THE **TENNESSEE FAINTING GOAT**, THE NARRAGANSETT TU AND THE DOMINIQUE CHICKEN, HAVE FOUND A HOME AND A FUTURE FOR THEIR BREE AT SWISS VILLAGE FARM

the animals favored by contemporary production agriculture.

The Gulf Coast Native sheep, for example, a breed descended

from animals imported into Florida and Louisiana by Spanish colonists, has over the centuries developed a natural resistance to internal parasites. In contrast, the sheep that are the basis of most modern flocks do not thrive unless dosed with antiworm medicines every three months, and the existing drugs are losing their effectiveness. Could the genes of the Gulf Coast Natives, bred or spliced into the chromosomes of more commercial breeds, provide a solution? Certainly not if the last few hundred of these animals have perished.

In early 2002, Swiss Village Farm personnel flew south to acquire Gulf Coast Native breeding stock. Once established in Newport, these animals were used to produce a novel kind of harvest. Semen, eggs, embryos, blood plasma and serum, and cellular material were taken from the animals and frozen in liquid nitrogen in a laboratory that the Tufts veterinarians had installed in the former dairy. Preserved at minus 325 degrees Fahrenheit, these materials will retain their vitality indefinitely.

The livestock industry, notes Dr. George Saperstein, a leader of the Tufts team at Swiss Village Farm, has in fact been collecting and storing semen from mainstream breeds for some time, and a handful of preservationists have a niques to endangered breeds. But this practic the male half of a breed's genetic material. The hensive sampling at Swiss Village Farm preservoss section of the breed. As such, it ensured the otherwise lost to agriculture can be resurrected library, this collection will also offer samples of all that future breeders and researchers can with the challenges that American farming inevita

New refugees continue to find sanctuary San Clemente goat, a descendant of Spanish onto a California island in the sixteenth cent samples to the bank, as is the Tennessee fain genital anomaly causes these animals to exper rary, harmless paralysis when startled). The turkeys and Dominique chickens must wait t

This, Mrs. Hamilton believes, will come. If focusing on the banking of cattle, sheep, and got it has already stirred the interest of the U.S. Agriculture and a variety of other institutions. In the future, all of America's endangered brea home. It may look like a toy, this mock Alpine always been a hardworking place. And what servants, and family seems likely one day to fee

