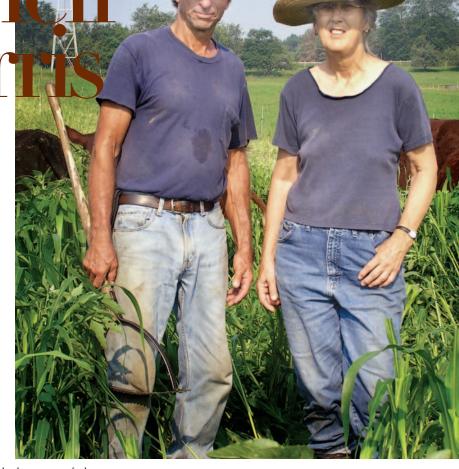
■ up close ■

SCAIN and Joan Harrier Harrier Exelos



in Stuyvesant (Columbia County), richly colored

red-brown cattle of the rare Devon breed graze a plush carpet of clover, grasses and nutritious dandelions, lazily slurping up the tasty leaves with muscular tongues. The animals are strikingly beautiful, with wide girths and sleek, shiny coats. Their size belies the fact most of the herd—all of the animals born on the farm—have never seen a kernel of corn or other grain. Mike Scannell has been farming here for 24 years; Joan Harris joined him eight years ago. They see themselves as part of an effort to recreate cattle as they are supposed to be: animals that thrive on grass.

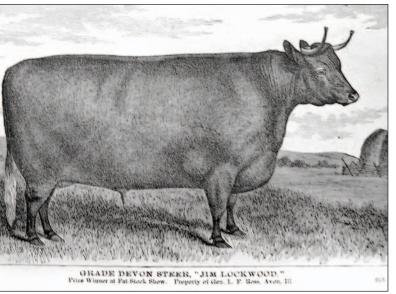
Over thousands of years in southwestern England, Devons have been genetically selected as grazers. The hardy, docile breed is one of the oldest breeds still in existence. The first purebred cattle imported to North America (in 1623 to the Plymouth Colony) were Devons. These compact animals look very different from modern beef cattle. Their bodies are built like barrels, their legs are short and their backs are straight on the horizontal.

Not very long after the couple started raising beef cattle, they began a quest for the "right kind of animals." They refused to accept that grass-fed beef would be tough and extra lean, and that animals on raised grass wouldn't easily fill out. They were looking for cows that when fattened on grass alone would be tender and tasty.

Drawings in *American Farming and Stock Raising*, a 115-year-old, three-volume set once owned by Harris's father, suggest that various cattle breeds

text and photos by tracy frisch previously possessed these adaptive traits. And Gearld Fry, the Arkansas cattle maven who interested Scannell and Harris in the breed, contends that even today, there's probably a subset of every breed as good as Devons.

About six or seven years ago, Fry came to Harrier Fields Farm to assess the farm's cattle. He was then consulting for the Northeast Livestock Alliance (NELA) to help farmers



develop gourmet-quality cattle that would finish on grass. Using ultrasound and linear measurement as well as his experienced eye, Fry determined that two-thirds of Harrier Fields' animals did not meet the grade. But he was impressed by the couple's commitment to their animals and to improving the fertility of their land.

Once Fry beckoned Scannell and Harris into the Devon world and took them under his wing, Harrier Fields began taking "giant steps," Harris says. First, the couple bought 50 cross-bred Devons (their previous purchases had been an animal or two at a time). Soon afterward, Fry offered them an opportunity to buy 10 pure-bred Devon cows. They jumped at the chance.

Searching for a great bull, Fry finally found what he was looking for in New Zealand. He imported a dozen Devons from the Rotokawa herd there, which he considers to be the top herd in the world. It had been selected in a grass-based system for 30 years. Fry is increasing the numbers of offspring these 12 superb animals can produce with the use of embryo transfer technique, a reproductive technology that involves two mother cows—an egg donor and an embryo recipient—along with artificial insemination. This method has been widely used by mainstream breeders of dairy and beef cattle for several decades.

Fry placed the Rotokawa Devons on Harrier Fields and three other farms. In exchange for some of the calves, Scannell and Harris care for the animals as part of their herd and participate in the embryo transfer process as partners. Despite his strong Luddite streak, Scannell has reconciled himself to this process for saving something precious—as a positive example, he cites the California condor captive-breeding program that rescued the species from extinction.

"It took thousands of years to make [cattle breeds], and 60 years to ruin them," he warns. "You can't make a great cow through a gene-splicing gun."

The "60 years" Scannell cites began with the rise of industrial feedlots and large-scale confinement-livestock production that occurred after World War II, when chemical factories used in military production were retooled for domestic purposes. Synthetic fertilizers and pesticides took hold as never before, and grain production soared—the surplus grain found a home in the bellies of farm animals. Aimed at consuming subsidized corn rather than producing meat efficiently, modern beef cattle have been bred for overly large, horsey frames that don't fatten easily on grass but serve the needs of feedlots. Scannell stresses that making cattle dependent on grain didn't increase the number of animals the nation could produce, it just changed who pocketed the profit.

Speaking of the cattle-agribusiness industrial complex, Scannell says, "If you buy their genetics, you have to buy their corn." Scannell says bigger carcasses also are desirable in the industry's point of view because they increase productivity per worker-hour in the slaughterhouse.

Changes in the philosophy of breeding also has contributed to the deterioration of livestock quality, according to Scannell. "Close" or "line" breeding, the basis for breed differentiation, fell out of favor, replaced by cross-breeding for hybrid vigor. The term "Angus," for example, has degenerated into designating any black beef. Fry subscribes to line-breeding, the traditional, age-proven approach to animal selection, now often derided in ag schools as "in-breeding."

Scannell and Harris both have farming in their backgrounds, though neither descended from a long line of farmers. Scannell spent his earliest years on his grandfather's dairy farm, but then his family moved away and his father became a golf course superintendent. His mother, a weaver and clothing designer, kept a flock of sheep. During high school, he kept riding horses. After serving in Vietnam as a helicopter mechanic, he went "riding broncs and bulls" on the rodeo circuit while earning his living as an itinerant blacksmith. (He calls shoeing horses "the most backbreaking

That ain't hay

The Harrier Field herd lives outside year round. Their deceptively simple dietary fare is pasture, with hay for about five months in the winter or when needed. Their diet is supplemented with higher levels of minerals in the winter. Specially blended, chelated minerals—\$4,000 last year for the 90-head herd—help make veterinarian bills almost non-existent.

Keeping 90 head of cattle on 80 acres of pasture is only possible with hay from off-site. Scannell and Harris lease about 150 acres from other landowners in the vicinity. Some rent to them, while others just let them use it. It's a dependency they wish to break. —TF

backbreaking job I ever had.") Laid up with broken bones, in 1977 he read *The Unsettling of America: Culture and Agriculture*, the seminal work by the Kentucky agrarian writer Wendell Berry. The influential book, which nourished the back-to-the-land movement, steered him back to farming. Almost immediately, he purchased a pair of draft horses that he housed at his parents' place, and for several years he put up loose hay with his team. With no mortgage or debt, he didn't have to make money farming, he says.

Scannell purchased his 60-acre farm near the Hudson River in 1983. The once-prosperous farmstead had fallen into

virtually antique tractors and having equipment picked up for a song required considerable upkeep in his shop.

During this period, Scannell produced a tremendous amount of hay—as many as 25,000 square bales a year—on the home farm and on leased acreage, finding a ready market with "horse people" for this feed. "I had it in my mind that you could only sell stuff [from a farm] for pets, not to feed people," he says in reference to his choice of horse hay as his main product.

From Scannell's perspective, the environmental damage caused by making hay year-in and year-out outweighed its



disrepair, but its relatively flat, open land with good, well-drained soil, an intact 1835 farmhouse, enormous barn with stalls for 11 draft animals, carriage house and various other outbuildings made it attractive. The parcel had been part of a larger pre-Civil War crop farm.

A good-paying union job as a longshoreman at the Port of Albany in 1979 had enabled Scannell to save up enough to buy the farm. For 10 years he worked part-time on the docks unloading banana boats; later, his mechanical and welding skills got him a more flexible job maintaining equipment in a Schenectady textile factory (he compares the workings of the mill's older looms to big manure spreaders.) He was able to work there half-years in the agricultural off-season until 1996, when a multinational firm bought the business.

Scannell wanted to do right by his land, but circumstances constrained his choices for many years. His demanding regime enabled him to pay off the mortgage in 11 years, but left him neither the time nor money to develop a truly viable farm operation. On the farm, he fixed the barns, worked the fields, trained his Belgian draft horses and, in intense bouts of self-exploitation, made hay. Old,

return on labor and capital: With each cutting, the nutrients and organic matter in the grasses and legumes are removed from the land, and unless there is enough manure or other fertility source from the farm to replenish this store, making hay is a losing proposition in terms of soil health. "One man can use up the life of the soil by constant cropping in 40 years," Scannell asserts, noting that he has "certainly seen the cumulative effects" in his lifetime.

Scannell always has farmed organically and for a few years got the farm certified as organic. But, he asserts, "Commodity organic never did me any good. I just didn't see how I would turn it into anything." His deeper aspiration was to run a self-sufficient, closed-loop farm, eventually concluding that this would require animals as the centerpiece of his farming system rather than cash crops of small grains, hay or vegetables.

Scannell's involvement with cattle got an inauspicious start about a decade ago when he arranged with a farm neighbor to raise 15 of his dairy calves. "I was looking for anything that would give at least an equal return to selling the raw material (the hay). Dairy heifers were the only thing I could think of. I was trying to avoid having to market my products."



I wanted to do better by the farm. Under the pressure of usury, you're not proud of. it's easy to do things

The impetus for putting cattle on his farm was a three-day course in "holistic management," a system that revolves around setting an overarching goal and then testing one's decisions with your family or business members. For Scannell and several others in the class, it was a turning point. He says he finally had found a framework for grappling with farming challenges. The class also led him to embrace management-intensive grazing, promoted as an effective way to capture solar energy, regenerate land and enhance the water cycle. "I took the course at the time the farm was paid for," he recalls. "I wanted to do better by the farm. Under the pressure of usury, it's easy to do things you're not proud of."

There is nothing trendy or fickle about Scannell's interest in nature and his deep sensitivity to environmental balance. On the farm he has observed 102 different bird species, an impressive count that he calls "pretty good," given the lack of ponds, streams and woodlands. (He abhors house cats

RAISING TOP-QUALITY, GRASS-FED BEEF will be the focus of a day-long workshop October 27 in Albany. A three-hour classroom session (featuring Jim Gerrish on pastures, Gearld Fry on animals and Jerry Brunetti on healthy farming) will be followed by a six-hour practicum. Participants include Kim Miller, former president of the Pennsylvania Association for Sustainable Agriculture, and Ken MacDowell, of New Zealand, recognized for his Rotakawa bulls. A workshop at Harrier Fields Farm covers the chute and a close look at successful pasturing. Includes a country-style lunch of natural beef and pork. Registration is \$99; attendance is limited. Call Allison White (800) 477-7579, or email allison@bakewellrepro.com. —TF

because they kill birds.)

Scannell named the farm after the northern harrier, a graceful hawk that frequents the farm in spring and fall, and in winters when the snow isn't too deep. They fly north to breed. One year, the farm even had a nesting pair—the farthest south recorded, Scannell says. The bird is less common now that surrounding land is planted in corn most years.

When he took possession of the farm, the fields at Harrier Fields Farm had been worn out by years of cropping and neglect. He knew instinctively and from his voracious reading that cash-cropping would not revive the land. But with conscientious management of the cattle's grazing, the land has undergone a remarkable restoration, supporting a vigorous, fairly drought-resistant sward of grass.

Once, or more often twice daily, Scannell moves each group of animals to a new section of pasture. These small fields, called paddocks, are separated with a single strand of electrified wire and seemingly fragile portable fiberglass posts. There currently are five groupings of cattle on the farm. A clean-up squad of draft horses frequently follows one or two of the cattle groups. The horses eat stemmy weeds and other plant material that the cattle avoid.

Management-intensive grazing, the scientifically-based method that Scannell has adopted, was introduced by a Frenchman named Andre Voisin about 50 years ago. Yet, many farmers still leave their cattle on a single pasture for a month or longer. "Set stocking," as this hands-off approach is called, quickly results in over-grazing—plants favored by the livestock never get a chance to regrow because the grazing animals keep devouring the new leaves until the plants die back. With pasture quality and quantity declining, animals cannot harvest the nourishment they need.

Joan Harris, an artist and teacher, met Mike Scannell at the Kinderhook Farmers' Market—he was at the market selling vegetables (a short-lived venture he ultimately abandoned because it did not suit his temperament or skills); she was looking for draft horses to serve as the model for a painting. A couple of years later, in 1999, Harris retired, became a grandmother, and joined Scannell on the farm. "In my wildest imaginings, I never would have envisioned a whole new life in retirement," she says. "I loved teaching, but I lived for the weekends." Harris's Staten Island-raised father loved horses and desperately wanted to farm. Employment in a defense plant enabled him to assemble the down payment for a 30-cow dairy farm in the Catskills. She grew up with draft horses there and drove the team for several years. She was tempted to stay and farm with her father, she says, but her love of art and a scholarship to SUNY New Paltz propelled her into a career as an art teacher.

Harrier Fields opened up a world reminiscent of the one she loved as a child, but one much larger and more stimulating. Pins on a map in their country kitchen show all the places on the continent that visitors to the farm have come from. Her involvement with the Devon association took her to Brazil, and for three years she produced calendars for the organization. (The project motivated her to pursue her art, since she used one of her paintings or drawings of the breed's cattle for each month. A true farm girl, she says, "I always liked doing things for a purpose.") Now she works constantly, a partner in every aspect of the farm's operation except machinery repair. The daily physical demands of the farm usually keep the couple close to home. "We come in and we can't think about going to a movie," she says, "and now that we eat completely healthy, we don't eat out."

For some people, selling comes easily. Not so for Scannell or Harris. It took a few pivotal events, including a Slow Food Festival at the Shaker Museum, in nearby Old Chatham, to bring Harrier Fields Farm to the attention of an appreciative audience. They also credit good friends like Willy Denner and Claudia Kenney, at Little Seed Gardens, a CSA farm in Chatham, with helping them reach out.

At this point, their sales are all local at the farm; now, after a slow start, demand for Harrier Fields' Devon beef is exceeding supply. They are especially proud that a few neighbors are buying their meat. "We are on a hugging basis with all our customers," Harris says. Many have become friends, including a photographer who has documented their farm and whose daughter likes to help with the animals, and a fellow teacher who has been trying to get healthy foods into the school.

This loyal following has given Scannell and Harris confidence to set their prices above their costs. (Just getting a steer butchered costs about \$500.) They sell their beef by the quarter of an animal for \$5 a pound hanging weight. Cattle that don't meet their standards instead go for ground meat (as did three cross-bred Devons last year). They have two local outlets for their hamburger.

As the offspring of the best cattle at Harrier Fields mature and breed, Scannell and Harris are becoming producers of



breeding stock rather than just meat. One of the reasons is their limited land base and rising property taxes in an area pressed by development. Scannell points out, "I can't compete with a guy in Wyoming who has 500 mother cows and pays less taxes than me." Harrier Fields has 43 mother cows.

And they are losing their ability and willingness to push themselves "to the max." A few years ago, with family help no longer available, Scannell broke down and bought a round baler to simplify haymaking. Now, the couple yearns to make less hay and they're looking for still other ways to farm without getting in debt, hurting the land or profiting on the backs of other people. With the Devon herd peacefully grazing, Scannell has gained hope. "I see it as a farm with a future; I didn't see a future before with cash crops," which, he says, "just wear out you and the land."

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