

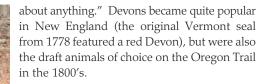




slaughterhouse. Lucky got his name after Earl with the Pilgrims, aboard their rescued him from that fate). Red and Rock are ship Charity in 1623. The breed the larger pair: magnificent, tawny, rust-hued is especially valued for its Devons weighing in at about 1330 and 1460 hardiness, docile temperalbs. respectively. At seven years of age, they're ment, and ability to thrive under approaching their prime years.

on these shores from southwestern England

rugged conditions. Earl finds that they're "resilient to feed, Devons - three heifers and a bull - first arrived will eat anything and stay body weight, and can survive just



Earl first saw this particular pair when they were 13 months old and loved their spirit. "They were at odds with each other...head butting each other...you can tell that they had some life to them. "

Tom and Lucky, the smaller pair, are two year old Durham Shorthorns; and despite weighing nearly 900 lbs. apiece, still are basically gangly adolescents. They're in training and do get yoked up to the sled behind the two older ones, but contribute little to the pulling effort











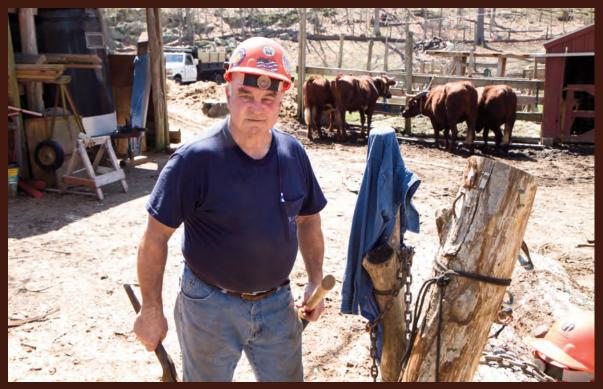








The domestication of wild cattle, called aurochs, first began over 10,000 years ago in the Near East, shortly after humans began to farm. Genetic studies (cattle are one of the few animals that have their entire genome mapped) have shown that modern day cattle are descended from as few as 80 animals in that region. It's believed that wild cattle were quite numerous, significantly larger and less docile than their descendants, offering what Science News in March of 2012 termed "considerable challenges" in their capture, management, and breeding. The use of cattle to pull loads (drafting) emerged somewhat later, perhaps 6000 years ago.



Like his ancestors, Earl's path to farming was somewhat circuitous, involving both the sea and the land. His great-great grandfather was a fisherman in Germany who emigrated to this country in the 1860's, worked in NYC sweatshops, and eventually bought a fishing boat with a dream of starting anew in Downeast Maine. As fate would have it, the family was at the mouth of the Connecticut River when the engine broke down. Heading inland for repairs, the boat hit a sandbar not three miles from the land that eventually became Townline Farm. Earl himself was in the commercial fishing industry in Florida for nearly fifteen years, then auto sales, before finally moving back to the farm 10 years ago.



work, the loads on the sled can increase.

stays close - loosely supervising

Earl feels that his main work with the oxen is "getting them to pay attention." The more he is able to do that, the easier the work proceeds. That means getting them to listen and respond to his commands.

the operation.

"The older ones know six or seven basic commands; the younger ones probably none at this point," Earl laughs. The first and most important to be learned is WHOA (stop), followed closely by HAW

then proceeds to GET UP (move forward), STEP IN (step toward the load/chain), STEP OUT (step away from the load/chain), and the pasture and don't handle them, they get BACK (move in reverse). These are the wild very fast. You have to handle them all classic commands used in North American the time."

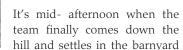
at this point. As they become larger and oxen work. Earl can sometimes be heard There's a science and an art to successful stronger and increasingly acclimated to the working the oxen a mile away, down the valley.

By 8AM everyone is ready to go, including proceeds in linear fashion. Earl certainly pleasure, or conversely, discomfort. For oxen, John the donkey, who wanders about but understands this. "Tom and Lucky can be scratching behind the horns, feeding a treat

positive and negative reinforcement; that is, It takes time to train oxen and usually never any type of action that gives the animal by hand, or taking a break are

training. It requires judicious use of both

ways to help them feel comfortable in the presence of the human and more willing to respond to whatever is asked. On the other hand, using a crop is one way to dissuade the animal from unwanted behavior. From the beginning, the human must be firm, patient, and persistent in helping the animal understand what is being requested.



(turn left), and GEE (turn right). The training very unruly. They just want to run, they just with the load of red oak. Earl, who's been in motion the whole time, looks a little tired, more so than the oxen. John the donkey seems none the worse for wear.

Earl will be asleep by 9PM.



want to go for food. You've got to work

with them all the time. If you let them out to