

## *Editor's Introduction*

### America's first feral hog war

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**THIS ISSUE** of *Human-Wildlife Conflicts* focuses on the management of feral hogs (*Sus scrofa*). As this exotic species has become more numerous and has expanded its range in North America, its adverse impacts on both our nation's agriculture and environment are becoming more apparent and alarming. How best to manage feral hogs has become one of the most vexing questions for wildlife agencies today, owing to society's mixed attitudes towards feral hogs (Rollins et al. 2007). Environmentalists and farmers want feral hogs eradicated. Others, especially those who enjoy hunting them, are rooting (pun intended) for the continued expansion of hog populations across North America (Sin 2007). Hence, any decision about how best to manage feral hogs will be controversial. Furthermore, feral hogs, with their high reproductive rate and secretive nature, have already become so numerous that many state wildlife agencies no longer have the ability to control their numbers, even if they wanted to do so.

In this column, I offer no solution to our feral hog problem, but, rather, I offer a historical perspective on North America's feral hog populations, reminding readers of George Santayana's admonition that "those who forget the past are condemned to repeat it." I can assure you that modern wildlife managers do not want to repeat the mistakes that the American colonists made in managing feral hogs, because if you think feral hogs are a difficult problem for us today, you should have lived in the American colonies during the 1600s. I'll focus this column on the feral hog crisis that gripped the several colonies that today make up the states of Massachusetts, Connecticut, and Rhode Island, because they are representative of how all of the colonies managed feral hogs.

When the first English immigrants established settlements in North America during the early 1600s, they brought livestock with them, including hogs. Starvation was a real threat to



Michael R. Conover (Photo by Davis Archibald)

the early colonists, and, therefore, the survival of their livestock was a life-or-death issue for them. John Winthrop and William Bradford, leaders of the Massachusetts Bay and Plymouth colonies, noted in their journals the arrival of every head of livestock from England (Conover and Conover 1989), indicating the importance of livestock to the colonists.

Hog husbandry during the Colonial Era usually consisted of ear notching each animal to identify ownership and then turning it loose to fend for itself from nature's bounty. However, the hogs preferred to feed in fields of wheat, corn, and oats. They ate colonists' gardens and broke into grain bins. Within a few years of colonial settlement, hog damage was a serious problem. In the words of the Connecticut's ruling body, the General Court,

[Much] hure, loss and damage doth accrue to this Common wealth and to particular person in the severall plantations, by those hogs that are kept or hearded in the woods, by their rooting upp and wronging otherwise the common feed of cattle, and by their hanging around and breaking through fences . . . into

mens corne and, and spoiling the same (Trumbull 1850).

Hog damage quickly escalated into a divisive issue that tore at the social fabric binding the colonists together and became a crisis for colonial governments. The crisis arose because farmers, while able to kill raccoons or deer that were destroying their crops, could not take lethal action against depredating hogs. Hogs were considered personal property, and if a farmer shot one in his cornfield, he had to repay the hog's owner the value of the animal. Instead of using lethal control, farmers were expected to capture any marauding hog, which was no easy task, given the hog's feral nature. The farmer then had to maintain it in captivity until the owner could be summoned to come and get it. If the hog accidentally died in captivity, the farmer was still liable for its loss (Conover and Conover 1987). Given that the farmer was responsible for providing food and water for any captured hogs, livestock owners were often slow to pick up their animals.

In 1643, the colony of Connecticut's General Court noted that hog damage "if not pruned for the future may be very pruidiciall to the publique peace" (Trumbull 1850) and passed a law that hog owners would no longer be liable for any crop damage caused by their animals unless the field was "sufficiently fenced." The latter was to be determined by elected "fence-viewers" who would travel through the colony and ascertain if fences were up to standards (Conover and Conover 1987). Obviously, such rules favored livestock owners at the cost of farmers and caused much dissent among the colonists.

Feral hogs caused equal consternation in New Haven colony. In 1644, its General Court lamented that the colonists "hath been much exercised with hogs destroying the corne" and tried to reassure its citizens that the "Courte took it into serious consideration how they might prevent the like damage for time to come" (Hoadly 1857). Ultimately, New Haven colony decided to pass laws similar to those in Connecticut colony that required all fields to be fenced. Still, the controversy did not end. In fact, New Haven farmers went on strike in 1650 and refused to grow corn as long as hogs in the colony were allowed to roam freely. A compromise was

reached in a town meeting where all agreed that free-ranging swine were to be driven >8 km away from New Haven (Conover and Conover 1987). This was a politically appealing decision; New Haven colony was so small that the ruling meant that New Haven's hogs would be driven into lands owned by neighboring Native American settlements. If hogs ate corn planted by Native Americans, few in New Haven cared. Likewise, the colony of Connecticut ruled that all hogs had to be driven west of the Connecticut River (Conover and Conover 1987).

Thus, while feral hog damage created strife and divisions among colonists, its impact on colonist–Native American relations was even more serious. Damage by feral hogs created anger and distrust between the colonists and Native Americans, who fed themselves primarily by growing corn and other crops. The colonists' hogs, of course, did not differentiate between the cornfields of colonists and those of Native Americans. The colonists expected the Native American farmers to follow English laws and respect English rights to own hogs. Native Americans did not understand why they could kill other animals that destroy their crops, but not kill hogs. The disagreements quickly escalated. In 1637, Connecticut's General Court ruled that any Native American settlement nearby would be the one held liable for the cost of any hog injured or killed by Native American dogs, traps, or arrows, even if the hog was killed by another Native American group (Conover and Conover 1987).

As an indication of unequal treatment, the General Court was willing to assume that the nearest Native American settlement was responsible for all Native-American-related damage; it was unwilling to assume that the nearest English settlement or farm was liable for all hog damage to Native Americans' crops. Instead, it ordered that Native Americans must fence their fields to acquire any protection from the colonists' livestock and to hold any offending hog until its owner could be identified (Conover and Conover 1987). The unfairness of this law was not lost on the Native Americans, who had always been able to use lethal methods to protect their crops from wildlife and had not been required to fence their fields. Even more irritating to the Native Americans was the fact that the English colonists were trying to impose

English laws on them.

When hogs destroyed their cornfields, Native Americans also had a difficult time making the colonist repay them for damages. When hog damage became too severe, they certainly could not go on strike as did the farmers in New Haven. Instead, they just went hungry. Because of these injustices and numerous others, the Wampanoag Confederacy of Indian tribes, who had been living in peace with the English colonists, rose up in rebellion against the colonies in 1675. King Phillip's War, as it was called by the English, lasted 2 years and cost the lives of over 600 colonists and 3,000 Native Americans.

Today, decisions concerning the management of feral hogs are unlikely to lead to war. However, there are lessons to be learned from the colonists' mismanagement of their feral hogs. Glossing over the problems caused by feral hogs today or selecting management options based on their political expediency will, as in colonial times, drive a wedge between various stakeholders and cause discord within our society.

A prerequisite for sound management decisions is an understanding of the ecology and current problems caused by feral hogs. As a small step in providing knowledge, this issue of *Human-Wildlife Conflicts* has focused on feral hogs. Herein, you will find articles on the ecology and behavior of feral hogs (Adkins and Harveson 2007, Engeman et al. 2007a, Mersinger and Silvy 2007), their impact on degrading habitats, spreading diseases, and reducing water quality across the United States (Hartin et al. 2007, Kaller 2007, Sin 2007), and evaluations of different approaches to managing feral hogs (Clay 2007, Engeman et al. 2007b, Rollins et al. 2007). I hope you will find these articles interesting and informative.

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