

The Ultimate Alien

There are indications that one of the most nefarious forest pests ever to arrive in North America may have attempted to establish itself on the continent as many as a thousand years ago. There is also evidence of later contact, especially along the Northeastern coasts. But it was not until some five hundred years ago that permanent colonies took root. The species appeared first on islands in the Caribbean, moved west to Florida, then to the interior of Mexico, and then began spreading itself northward. Within a hundred years, it made substantial inroads into North America, and, by the mid-seventeenth century, it had set up permanent colonies.

Not unlike leafcutter ants, termites, beavers, and a few others, this species tended to alter the habitats in those areas where it established its colonies. Like its fellow mammal, the beaver, its normal feeding habits required that it cut down trees. Unlike beavers, however, this species also tended to alter the architecture of the native soils. It not only felled the local trees but rooted in the soils to encourage the growth of plants upon which it would feed, many that it had imported from its native Europe.

The actual makeup of the native American forests before the arrival of the pest is much debated. There are some theories that suggest that the great Atlantic forest consisted of immense towering trees that so shaded the forest floor that wide vistas of parklike lands stretched beneath them. Newer thinking holds that these mixed forests consisted of smaller younger trees and a thick understory of brush—the theory being that, except in certain sheltered areas, the forests were constantly subjected to pruning by insects, fires, and storms. In either case, although there were wide glades and openings and extensive beaver meadows along streams in some areas, it is generally agreed that these mid-Atlantic forests stretched from the east coast to the Mississippi. The old homily was that a squirrel could cross from the coast to the Plains without ever touching ground.

But it was all doomed.

The generally accepted figure is that by the midnineteenth century, because of



its feeding patterns and because the new-coming species used wood to construct its dens and lodges and even developed the habit of intentionally burning the wood, the great Atlantic forests were reduced to a mere 15 percent of their original size. The mammalian and avian species that lived in these forests before the sixteenth century were considered some of the most diverse on earth. But, as the invader moved west, these declined dramatically. As early as 1700 in some sections of the East, bears, moose, wolves, whitetail deer, cougars, and turkeys had been killed off, forcing the new-coming predator to range farther west in its hunting forays.

Like many of the most destructive aliens, the invaders were omnivorous. The general pattern was that the more predatory individuals would move into the forests to those frontiers as yet unspoiled and would be followed by the less vicious but more destructive herbivores. This pattern progressed over a period of three centuries, eliminating some of the most common species of the forest east of the Mississippi: the wood bison, wapiti, moose, beaver, mountain lion, bear, wolf, bobcat, lynx, and a number of smaller animals such as the fisher. Some of these native species were driven to extinction as a result of the forest decline and the predation of newcomers. Of these, the most dramatic was the case of the passenger pigeon whose numbers were once so great as to darken the skies for days during their annual migrations.

The earth is nothing if not resilient, however; and a new forest has returned to much of the cleared land. This new forest may be threatened yet again by other forces, but at least the alien species that first leveled the trees has now adapted—one hopes—to its new environment and comprehends that such a disaster should not come again.

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