Deer Populations of the Puget Sound

Two species of deer have been prevalent in the Puget-Sound area of Washington State in the Pacific Northwest of the United States. The black-tailed deer, a lowland, west-side cousin of the mule deer of eastern Washington, is now the most common. The other species, the Columbian white-tailed deer, in earlier times was common in the open prairie country; it is now restricted to the low, marshy islands and flood plains along the lower Columbia River.

在太平洋西北区的美国华盛顿州，有两种鹿在普吉特海湾非常普遍。最常见的黑尾鹿是华盛顿东部杂交鹿在西部的表亲，它们生活在低地。另一种哥伦比亚白尾鹿，从前在开阔的草原上很常见，而现在只能在低矮的沼泽岛屿地带和哥伦比亚河下游的河滩地区才能看到它们。

Nearly any kind of plant of the forest understory can be part of a deer's diet. Where the forest inhibits the growth of grass and other meadow plants, the black-tailed deer browses on huckleberry, salal, dogwood, and almost any other shrub or herb. But this is fair-weather feeding. What keeps the black-tailed deer alive in the harsher seasons of plant decay and dormancy? One compensation for not hibernating is the built-in urge to migrate. Deer may move from high-elevation browse areas in summer down to the lowland areas in late fall. Even with snow on the ground, the high bushy understory is exposed; also snow and wind bring down leafy branches of cedar, hemlock, red alder, and other arboreal fodder.

森林里，几乎任何植物都是鹿的食物。在森林抑制草和其它草甸植物生长的地方，黑尾鹿可以吃越橘、北美白珠树、山茱萸和其他几乎所有灌木和草；但这些只能在好天气里才能吃得到；在植物衰败、隐匿的严寒季节，黑尾鹿们是如何过冬的呢？避免冬眠的一种方法就是天生的迁徙习性。它们会在夏天迁徙到高海拔觅食区，直到秋天结束再回到低地。即便地面还有残雪，高的灌木也会露出来；风雪天气会把雪松、铁衫、红桤木和其它乔木多叶的树枝带下来。

The numbers of deer have fluctuated markedly since the entry of Europeans into Puget Sound country. **The early explorers and settlers told of** abundant deer in the early 1800s and yet almost i**n the same breath bemoaned** the lack of this succulent game animal. Famous explorers of the north American frontier, Lewis and Clark arrived at the mouth of the Columbia River on November 14, 1805, in nearly starved circumstances. They had experienced great difficulty finding game west of the Rockies and not until the second of December did they kill their first elk. To keep 40 people alive that winter, they consumed approximately 150 elk and 20 deer. And when game moved out of the lowlands in early spring, the expedition decided to return east rather than face possible starvation. Later on in the early years of the nineteenth century, when Fort Vancouver became the headquarters of the Hudson's Bay Company, deer populations continued to fluctuate. David Douglas, Scottish botanical explorer of the 1830s, found a disturbing change in the animal life around the fort during the period between his first visit in 1825 and his final contact with the fort in 1832. A recent Douglas biographer states:" The deer which once picturesquely dotted the meadows around the fort were gone ?in 1832?, hunted to extermination in order to protect the crops."

自从欧洲人进入了普吉特海湾，鹿群的数量发生了显著的变化。早期的探险家和殖民者说起在19世纪早期那儿有大量的鹿群，与此同时惋惜现在这种诱人动物的稀少。著名的北美探险先驱者刘易斯和克拉克在落基山西部经历种种困难，并且直到第二年12月他们才杀死了第一只麋鹿。为了让40人在冬天里存活，他们消耗了150只麋鹿和20只小鹿。当猎物在早春时期迁徙出了低地，远征队决定返回东部而不是去面对潜在的饥饿。此后在19世纪最初几年里，温哥华堡成为哈德逊湾公司的总部，鹿的数量持续波动。19世纪30年代，苏格兰植物学探险家大卫•道格拉斯发现了他在1825年第一次的探访和1832年的最后接触之间出现在温哥华堡附近令人不安的变化。在道格拉斯近期的传记中陈述到：在1832年曾经如画般点缀在温哥华堡附近草地上的鹿群已经消失了，为了保护农作物猎杀致灭绝。

Reduction in numbers of game should have boded ill for their survival in later times. A worsening of the plight of deer was to be expected as settlers encroached on the land, logging, burning, and clearing, eventually replacing a wilderness landscape with roads, cities, towns, and factories. No doubt the numbers of deer declined still further. Recall the fate of the Columbian white-tailed deer, now in a protected status. But for the black-tailed deer, human pressure has had just the opposite effect. Wildlife zoologist Helmut Buechner(1953), in reviewing the nature of biotic changes in Washington through recorded time, says that "since the early 1940s, the state has had more deer than at any other time in its history, the winter population fluctuating around approximately 320,000 deer (mule and black-tailed deer), which will yield about 65,000 of either sex and any age annually for an indefinite period."

鹿群数量的减少预示了它们今后生存的艰辛。当殖民者入侵它们的领地时，人类在它们生活的土地上进行采伐、焚烧，清除障碍，最终将公路、城市、城镇和工厂代替了荒野风景。毋庸置疑，鹿群的数量进一步减少。回想起来，哥伦比亚白尾鹿的命运，现在已经处于被保护地位。而对黑尾鹿来说，人类的压力反而产生了相反的效果。野生动物学家赫尔穆特•布希纳（1953）通过已有记录评论了华盛顿地区生物的自然变化，他说：“20世纪40年代早期，美国拥有比以往任何历史时期都多的鹿群，鹿群冬季的数量在接近32万只鹿（杂交和黑尾鹿）左右波动，在此之后的每一年不同年龄段的公鹿和母鹿数量分别会增加至65 000只。

The causes of this population rebound are consequences of other human actions. First, the major predators of deer-wolves, cougar, and lynx-have been greatly reduced in numbers. Second, conservation has been insured by limiting times for and types of hunting. But the most profound reason for the restoration of high population numbers has been the fate of the forests. Great tracts of lowland country deforested by logging, fire, or both have become ideal feeding grounds of deer. In addition to finding an increase of suitable browse, like huckleberry and vine maple, Arthur Einarsen, longtime game biologist in the Pacific Northwest, found quality of browse in the open areas to be substantially more nutritive. The protein content of shade-grown vegetation, for example, was much lower than that for plants grown in clearings.

这种鹿群数量的反弹是由于人类其他活动造成。首先，狼、美洲豹和山猫等鹿群的主要猎食者急剧减少。其次，通过限制捕猎时间和捕猎种类来保护鹿群。但鹿群数量恢复的主要原因在于森林减少。大部分的低地的树木被砍伐、焚烧，进而成为了鹿群理想的生活场地。以便他们去寻找更适合的嫩叶，比如越橘类和枫叶。太平洋西北的生物学家亚瑟•埃纳森还发现在空旷地区的高质量的嫩叶大部分都是很有营养的，就像在遮蔽中生长的植物，他们所包含的蛋白质比那些在空旷地区生长的植物的蛋白质低得多。