## CHAPTER 1

## Introduction

Darin Stringer



Figure 1. Aspen are more than a splendid backdrop for trophy elk; they provide critical habitat for a broad range of wildlife. (Photo: Rocky Mountain Elk Foundation)

Quaking aspen (*Populus tremuloides*) is one of a few iconic trees that symbolize the spirit of the West. Though sparsely distributed throughout Oregon, aspen is an important species, providing a long history of benefits to both people and wildlife. "Quakies," as many call aspen, are well liked by ranchers, hunters, foresters, and city folk alike. Even so, this tree is declining throughout the West and has already disappeared from much of the landscape. Ensuring a future for aspen on working lands and wildlands will require efforts by landowners across the region.

Some may say, "Sure, aspen are pretty, but I've got plenty of other important things to do on my land. Why should I manage for aspen?" Aspen provide year-round benefits. In summer, the cool, humid understory of aspen groves provides refuge on hot, dry days. Basque sheepherders of years past knew this. Some of their camps are still identified by tree carvings or "arborglyphs" they inscribed on aspen trees (see page 7).

The shade and moist air created by aspen also provide a measurable benefit during fire season. Sometimes called "asbestos trees," aspen have been known to moderate fire behavior in some situations. Aspen also can enhance water flows by accumulating snowpack more readily than conifers. During autumn, aspen foliage colors the

landscape. In the winter, aspen provide food for various types of wildlife.

Aspen are heavily used by wildlife. Quakies provide excellent hiding and thermal cover, fawning and calving ground, and forage for deer and elk (Figure 1). Bird use is often higher in aspen groves than on surrounding lands. Species such as ruffed grouse, beaver, bats, woodpeckers, and many neotropical migratory birds use aspen. These groves are so widely used that the Oregon Department of Fish and Wildlife lists aspen as a strategy habitat in its State Conservation Strategy. Groups such as the Rocky Mountain Elk Foundation, Ruffed Grouse Society, and Oregon Hunters Association are focusing major efforts and resources to enhance aspen.

The cool shade and abundant forage that attract wildlife also benefit livestock. Without active management, forage production can be reduced by as much as 70 percent or more when aspen are replaced by conifers. The grasses and flowers that comprise this forage also contribute to plant diversity, which in turn benefits insect pollinators, hummingbirds, and other beneficial critters (see page 2).

Whether your interest is wildlife, aesthetics, or general land stewardship, maintaining and enhancing aspen on your property requires active management.

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If you are a landowner or a manager, this guide will help you improve management of your aspen by:

- Increasing your understanding of aspen biology and ecology
- Helping you set goals and objectives for stewarding aspen
- Demonstrating how to assess the condition of aspen groves and prioritize areas for treatment
- Describing various treatment options and tradeoffs and providing examples of completed projects
- Suggesting techniques to evaluate the effectiveness of treatments
- Listing available resources to assist in the management of aspen

## A SMORGASBORD FOR WILDLIFE

## Tom Rodhouse

When I think of a stringer of aspen running up a hillside in eastern Oregon, I envision it as one of the land's arteries, transporting nutrients and energy through the system. All kinds of wildlife use aspen stands, making their importance disproportionate to their acreage. Aspen stands are biological hotspots; they attract species that don't occur in the surrounding landscape. Warblers nest and stop over in aspen groves during migration, while elk find cover in aspen during summer and drop their calves there.

Aspen stands are a particularly important resource for cavity-nesting birds and bats because of the structural characteristics of mature stands (Figure 2). The big trees, both living and dead ones, often are excavated by woodpeckers and insects. Their cavities in turn provide homes for dozens of other species.

One of the things that has always excited me about aspen ecology is its cascading effects through the food chain. Many types of insects feed on the leaves, in turn attracting insectivorous birds and bats. Porcupines like the soft bark, while rodents and shrews enjoy the

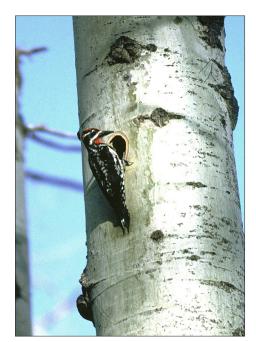


Figure 2. Aspen provide excellent habitat for cavity-nesting birds such as woodpeckers. (Photo: Jim Anderson)

abundant vegetation and insects in the understory. Next come the predators—weasels, hawks, and coyotes. It's a real smorgasbord for wildlife and a treat for anyone who loves critters!