

A CREEK RUNS THROUGH IT

by
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The privately owned forested lands surrounding Cannon Beach are going to be harvested. Many of these lands have not been logged for approximately 45 years. There are many questions being asked within and around the community about: Who owns these private lands? How much do they own? When and where will harvesting take place? The logging methods being considered are raising concerns about land use and the impact this will have on Cannon Beach's watershed stability and public health. This article is an attempt to stop the rumors, clarify, define, and present alternatives to these logging activities.

PROPRIETY

The ownership of forestlands adjacent to Cannon Beach consist of 66 acres of city land, 800 acres of Clatsop State Forestland (ownership pending*), with Cavenham Forest Industries owning the remaining majority; totalling 175,000 acres in Clatsop County.

Hanson PLC, an international industrial management company based in the United Kingdom and United States, bought Cavenham Forest Inc. from Sir James Goldsmith on December sixth, 1990. Renamed Cavenham Forest Industries, a division of Hanson, they currently own 1.75 million acres in the northwestern and southeastern U.S., making it the nation's sixth largest private timberland holder.

watershed: 2 The whole region or area contributing to the supply of a river or lake, drainage area.
-Webster's New Collegiate Dictionary

The sources of Cannon Beach's water supply are located in the forestlands behind the town. The city's 66 acres contain underground springs which provide Cannon Beach with its primary drinking water. The Elk (Ecola) Creek watershed, Cannon Beach's reserve water source, runs predominately through Cavenham land. As the resident and visitor populations increase, so will Cannon Beach's dependency upon the Elk Creek watershed.

Water is a physical necessity of life. Naturally clean water, a nonrenewable resource, is decreasing in amount and availability; it is a priceless commodity to fish and wildlife, as well as humans. The forested areas along streams and rivers hold the key to protecting water quality and water flow. These areas, known as riparian zones, provide an important source of year round water supply which act as a sponge soaking in water during the winter months and slowly releasing it throughout the year. The protective cover offered by forests in critical riparian and upslope zones are necessary for prevention of landslides, mass movement of soils, and erosion.

Riparian zones help keep water temperatures cool, therefore decreasing populations of organisms and bacteria, harmful to both fish and humans. They act as buffers and filters against siltation as well as provide and store nutrients needed by aquatic and terrestrial ecosystems. In addition, riparian zones provide the structures and food sources needed for successful spawning of native fish species (Forest Conservation Council, 1992).

WILD SALMONIDS

A statewide study of 300 watersheds conducted by the Oregon Department of Fish and Wildlife (ODFW), has defined Elk Creek as a critical, "relatively intact" watershed. The Elk Creek drainage contains no hatchery fish stock native to this system; all species are wild. Despite previous clearcutting, natural regrowth has occurred in the Elk Creek watershed; this has permitted a healthy, biodiverse coastal forest habitat and wild salmonid population to revive. Currently, some of the watershed's timber is of mature age for harvest; commercial thinning is now taking place.

According to the ODFW, wild species of coho (near endangerment), fall chinook, winter steelhead, sea-run cutthroat, and resident cutthroat currently use Elk Creek as residence and spawning pools. Although these salmonid populations are substantial when compared statewide, their numbers are not enough to guarantee survival of a commercial clearcut. These wild fish need

the complex habitat of an older forest to provide a healthy riparian zone conducive to future salmonid regeneration.

BUFFERS

The Forest Practice Rules, which regulate forest operations on private and state lands, state that riparian management areas (buffer strips), protective areas adjacent to an area requiring protection - such as riparian zones - have been mandated for Class I and Class II streams. Elk Creek is a designated Class I stream which currently requires that a buffer zone be three times the width of the stream, but shall not average less than 25 feet or more than 100 feet. Although buffer zones are required to protect a given area, this does not mean that they remain untouched.

In the FPA rules under 629-24-546 PROTECTION OF WATERS OF THE STATE, operators shall:

3. (a) Maintain an average of 75% of the preoperation shade over the aquatic area along Class I waters;
- (b) Retain at least 50% of the preoperation tree canopy in the riparian area along Class I water.

HARVESTING

Bob Teagle, Cavenham's Area Forester, assures that the company's operations stick closely to the FPA's minimum requirements in harvesting their tree farms.

Cavenham's current tree harvest rotation is approximately every 45-55 years. They implement three interval methods of harvest: pre-commercial thinning, commercial thinning, and clearcutting.

Pre-commercial thinning takes place between the ages of 12-18 years. The purpose of thinning these areas is to remove undesirable trees, leaving their remnants to nourish the soils for those remaining. As a result, the higher yielding trees have more exposure to the elements allowing greater growth productivity.

Commercial thinning occurs between the ages of 35-45 years of age. Teagle explained that this process allows sunlight to pass through the canopy providing increased growth space for the bigger, healthier trees; therefore maximizing growth and yield. He also stated that this would be the predominate method used in logging the Elk Creek Watershed and drainage. When logging steep areas around a stream, company practices use a cable extended over the stream to lift trees across; or they build more roads to prevent crossing. Dragging logs across the stream bed is prohibited by Forest Practice Rules.

Clearcutting is Cavenham's final harvesting stage. It usually occurs between the ages of 45-55 years. A clearcut leaves fewer than 50 trees per acre. In accordance with Senate Bill 1125, the maximum area of a clearcut may not exceed 120 acres. SB1125 also states that a 300 foot buffer must remain between clearcuts.

Clearcutting is the predominant silviculture (the art and science of growing trees) system throughout Oregon. In the short term, it reduces problems for timber industries by expediting operations. They save the cost of selecting trees to be cut and don't have to exercise caution to avoid trees that will not. Also, many industry specialists agree that clearcutting generates the most profits, leads to better harvests, and is the only economically feasible harvest technique in areas, like Clatsop County, where maximum timber production is the goal (Schultz, 1990). In the long term, however, clearcutting impairs productivity of the land by causing accelerated erosion and loss of top soil, stripping away essential nutrients. It also impairs the habitat that is essential for the survival of various wildlife species, as well as increasing hazards of insects and diseases; this names just a few.

ALTERNATIVE METHODS

Over the years, the Northwest timber industry has experimented with other harvest methods. The most common are small patch or strip clearcutting, the shelterwood method, the seed tree method, and the selection method.

Small patch lessens the impact of clearcutting by reducing the area cut at any one time. The total cut is the same, but broken into smaller patches and strips. The shelterwood method removes all canopy trees, but in several cuttings over several years. The seed tree method also leaves selected trees standing to provide seed



UPPER LEFT EDGE JULY 1993

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