

International
Migratory Bird
Day (IMBD),
held annually
on the second
Saturday in
May, is an
invitation to
celebrate and
support
migratory bird
conservation.

IMBD Information web - http://birds.fws.gov/imbd phone - 703 /358-2318

IMBD Materials web - http://www.BirdDay.org phone - 1-866/334-3330

**January 2006** 

# What is the Boreal Forest?

## IMBD Explores a Wilderness Treasure

The Boreal Forest is immense, spanning the globe 6.5 million square miles across northern regions of Russia, Scandinavia, Canada and Alaska.

In North America, the Boreal stretches 1.5 billion acres from interior Alaska across Canada to the Atlantic Ocean. It is large enough to hold 14 Californias, and it accounts for 25% of the world's remaining intact forests. In fact, there is more intact forest in the Canadian Boreal than in the Brazilian Amazon.

#### **Ecological Values**

The Boreal Forest ecosystem is an extraordinary mosaic of interrelated habitats made up of forests, lakes, wetlands, rivers and tundra at its northern edge. The Boreal Forest region is dominated by spruce, aspen, birch, poplar and larch or tamaracks. Thirty percent of North America's Boreal is covered by wetlands, consisting of bogs, fens, marshes, an estimated 1.5 million lakes, and some of the country's largest river systems.

The Boreal floor is covered by a dense layer of organic matter made up of peat and moss that is more than 10 feet thick in some areas. This cover is created when fallen trees, pine needles, leaves, and other plant remains fall to the ground and are prevented from decomposing by the cold boreal temperatures. This groundcover is particularly effective in storing carbon, and the boreal forests of Canada and Russia together store more carbon than any other terrestrial ecosystem on the planet.

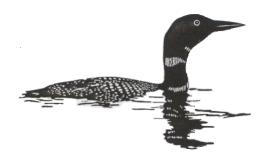
Because the icy temperatures of the boreal act as a global refrigerator, they are able to keep plant remains from decomposing, thus preventing the release of carbon into the air. The sheer size of the forests may help to regulate the earth's temperature, as it represents an area large enough to help buffer the dangerous effects of climate change.



American Boreal Forest covers 2.3 million square miles -- 75% of the entire size of the contiguous United States.

The North

Map courtesy of the Boreal Songbird Initiative



The Common Loon is one of the most familiar and cherished birds of the region, and up to 70% of its population relies on the Boreal Forest to nest and breed each year.

### **People**

Despite its remote location and natural ruggedness, the North American boreal is home to fourteen percent of Canada's population, or roughly four million people. One third of these inhabitants are aboriginal. There are over 600 indigenous groups living in the area, generally formed into tribal groups known as First Nations. Indigenous Peoples of the Boreal Forest have linked their existence to the forest for hundreds of years, using the trees for heat, the plants for healing, and the animals for both food and clothing.

#### Wildlife and Birds

The variety of animals that coexist with humans is impressive, with mammals as enormous as a moose and as tiny as a pygmy shrew! The forest is home to the continent's largest population of wolves, lynx, black and grizzly bears, and even the threatened woodland caribou. Over 80 species of butterfly and 40 species of dragonflylive in the Boreal, which also provides over half of the remaining habitat for Mink and Wood Frogs as well as Canada Toads. The lakes of the boreal are teeming with some of the world's largest trout, bass, perch and whitefish.

The best known of the boreal's creatures, however, are the birds. According to Bird Studies Canada, billions of birds breed in the Boreal Forest each spring. Over 300 species regularly occur in the boreal forest, most of them nesting and breeding in the vast forest and its wetlands. The boreal is so important to birds that for at least 96 species, half of their entire breeding populations occur within the region.

The diversity of birds using the boreal is impressive. The list includes:

- · loons and grebes
- •swans, ducks and geese
- •hawks and owls
- •sandpipers
- vireos and flycatchers
- •warblers and sparrows

For more information on the birds of the Boreal Forest, go to www.borealbirds.org.



**Opportunity for Conservation** 

The Boreal offers us a chance to conserve one of the Earth's most important wilderness treasures. Although only 8 percent of the boreal is protected, it is still largely intact, with 80% of its land still undeveloped. Unfortunately, one third of the remaining land has already been allocated for industrial use, and the decisions we make in the next few years will play a large part in determining the fate of this vast, biologically rich and largely unspoiled ecosystem.



 $Snow shoe\ hare$ 

A coalition of industry, environmental, and First Nation groups has been formed in an effort to combine conservation with sustainable economic development and protect at least half of the boreal from future development. The Boreal Forest Region Conservation Framework is a bold vision to protect 50 percent in a network of large interconnected areas and encourage sustainable, world leading development standards on the remaining landscape.

For more information on recent efforts to protect the Boreal, or how you can get involved, please visit www.borealcanada.ca.

The Boreal provides over 50% of the remaining habitat for moose, as well as safe haven for grizzly bear, Canada lynx, and more than a million caribou.