170 Mile Creek Road Grand Portage, MN 55605





## gwiingwiishi (Canada Jay)

We see gwiingwiishiwag (Canada Jays) when we camp or picnic on the North Shore. Nick-named "Camp Robber" because they appear where human food is available and might even take some from your hand. They live in the boreal forest and Rocky Mountains, and use resin of boreal conifers to help preserve their winter food stash. The freeze-thaw cycle of warming winters spoils the defrosted cache, like unplugging your freezer would at home. Because chicks hatch at the end of winter before fresh food is available, their survival depends on this stored food.

Canada Jays have incredibly thick, fluffy plumage that puffs up in cold weather, and protects their legs and feet - even their nostrils are covered with feathers. They nest during late winter, incubating eggs in temperatures that may drop below minus 20°F.

To store large quantities of food, Canada Jays use sticky saliva to glue small food items behind flakes of bark, under lichen, in conifer needles, or in tree forks above the height of the eventual snow line, and can remember where their food is cached for later use.

Northern Minnesota is at the southern edge of their range. To thrive here depends on cold winters, so they are considered an indicator species of what is happening with the boreal forest as climate changes.



