

# Vancouver Island Marmot



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*Marmota vancouverensis*

By Syndy De Silva

Pretend for a moment that you live in a small town of less than 100 people. That is about a quarter the size of an average elementary school, where everybody knows everybody. Now imagine that was the entire population of human beings in existence in the entire world. That's a pretty scary thought. Well, that's exactly what is happening to one of the world's most endangered animals, the Vancouver Island marmot. In fact, these cuddly little animals, who are the largest member of the squirrel family, have had a population count as low as 30 in the past. One of fourteen marmot species, the Vancouver Island marmot has been listed as endangered since 1978. Fortunately there have been some steps taken to protect this endangered species.

## Characteristics:

Out of a burrow in the ground a rodent about the size of a housecat, 5-7kg (12-14 lbs), pokes her head. She sniffs the air with large nostrils that are part of her black flattened nose and blunt snout. She can be identified as a Vancouver Island marmot specifically because of her deliciously rich chocolate brown coloring with contrasting white patches. This is one of the distinguishing characteristics of Vancouver Island marmots from the rest of the marmot families. Her little round ears twitch this way and that. Don't be fooled by their size; these ears are extremely sensitive. Her eyes are small and allow for only monocular vision (vision relating to one eye). Behind her, another marmot pops up from the burrow. By his size and fur characteristics it is safe to assume that he is a pup, as his fur is very dark in color – almost black. This will begin to fade in late summer. When he is a yearling his fur will have faded into one uniform color. After his second

year, it will be difficult to determine his exact age since the fur and molting patterns will have become unpredictable.

## **Habitat:**

This young mother marmot and her pup, along with all other Vancouver Island marmots, are endemic to beautiful Vancouver Island. This species of marmot live in the high mountains of the central island, as well as rocky slopes, logged sites and within thick clumps of alder trees. The mother marmot hops on top of a large boulder. These boulders provide excellent look-out spots, and retain heat to help marmots control their internal body temperature.

After the two marmots feel safe they begin munching greedily on the plentiful herbs and forbs to eat, which the sub-alpine areas provide. Over 50 different plant species, including huckleberries, kinnikinnick fruit, cow parsnip, asters, sweet peas, and wooly sunflowers are on the menu. The menu is strictly vegetarian since these animals are herbivores. The dew that is collected on the plants provides a significant source of water.

## **Behaviour:**

After a fine feast the mother marmot and her pup quickly go back into their burrows. It is a safe haven that provides shelter from the elements and predators. They spend a significant amount of time in their homes, coming above ground for only a few hours in the early morning and late afternoon. Since so much time is spent in the burrows these abodes are often elaborate with many passages and various exits.

The mother and her pup happily reunite with the rest of their colony, which typically includes more than one family group. Their family is similar to other Vancouver Island marmot families in that it includes one adult male, a few adult females (sometimes, however, there is only one adult female), and an array of brothers and sisters for the pup whose ages range from sub-adults, to yearlings to young of the year (pups). Marmots are considered monogamous.

The months have passed and it is now September. The mother, pup, and the rest of the family of marmots are ready for hibernation, which will last until late April or May. It was a good thing that they ate so many of those delicious plants, since it is the fat that they have accumulated during the summer that allows them to survive hibernation.

In the spring when they wake, mating takes place under ground in the burrows with adults that are at least 4 years old. Soon a new generation of pups will emerge after a relatively short gestation period of 30 days. There can be anywhere from 3-5 pups born into a litter. The first month of a new pup's life is spent underground with their sole guardian, their mother. Only after the first month do they begin to go outside.

## **Life Cycle:**

Marmot females, who have a life span of 7-9 years, mate every other year at the most. Male marmots will live a natural lifespan of about 5-6 years.

## **Threats:**

Of course, many marmots will not live out their entire natural life span. Many will sadly die during hibernation, as this is when they are physically at their weakest. Pups are especially prone to this. Another cause of mortality is predators, particularly wolves, cougars, and golden eagles. But before an eagle can make its killer swoop, or a cougar its stealthy attack, the marmot will sound its shrill alarm call as warning. They have 3 distinct types of alarm calls varying in pitch. The Vancouver Island marmot also has a very distinct “kee-aw” sound that is unique only to them and no other marmot species. Their most frequent call is a high-pitched whistle, hence their nickname “whistle pig”. Sadly, a major cause for the decline of the Vancouver Island marmot population is not one for which they can sound an alarm. The threat comes from habitat destruction or alteration, in the shape of resorts and other recently logged areas. Although the marmot will inhabit these logged areas, the problem lies in that the young-adult marmots do not disperse into areas that are more far-flung. This creates a smaller gene-pool, which in turn makes the marmots more vulnerable. Also, a more concentrated area of population is more at risk than a population that is more widely distributed.

## **What We Can Do To Help:**

To combat the problem and increase Vancouver Island marmot numbers a recovery plan has been put into action that includes not only the government but also relies heavily on public support in the forms of fund-raising, public relations and education. The emphasis of the recovery plan is on captive-breeding, with marmot reintroduction to formerly occupied sites. The goal is to gradually increase marmot numbers so that they can safely be taken off the critically endangered species list.

The Vancouver Island marmot is an intelligent, vocal and social creature, and although their numbers are low now, with awareness and concern from the public perhaps their numbers can grow and these wonderful creatures may begin to thrive and flourish once again.

## **Other Interesting Facts:**

--- Vancouver Island marmots are the most endangered animals in Canada and among the most endangered mammals on Earth.

--- The Marmot Recovery Foundation recorded 22 new pups born in 2012, that are part of an active recovery plan for the species.