

NATURE DETECTIVES

Summer 1998

Nature's Engineers

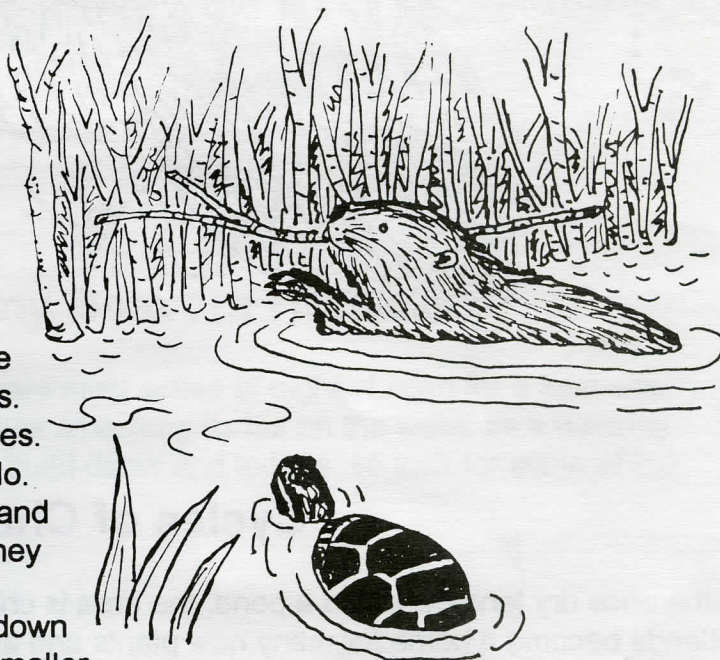
In springtime while you are planning your summer vacation, the beaver family is waiting for the birth of a new litter. Baby beavers, or kits, are born with all their teeth. Their front incisors are as sharp as chisels. They can eat bark and leaves when they are just a few days old.

The newborn kits share their lodge with their parents and their one-year-old siblings. The first summer, kits learn adult skills by watching the older beavers. They do not help with lodge or dam work. They romp around and enjoy being fed and groomed.

That fall the kits help to collect and store food for winter. Beavers are vegetarians. They eat grasses, roots, leaves, and trees. Do you think they eat the entire tree? No. They just eat the leaves, smaller twigs, and the soft cambium just under the bark. They use the woody parts of the tree for their lodge. For their winter pantry, they cut down trees (they love aspens) and store the smaller branches in piles underwater.

The beaver family spends winter huddled in the lodge, eating their stores of food. When the warmer days of spring arrive, the beavers get out for some fresh air. They play in the water, swim around, and just have fun. They feast on young leaves and juicy grasses. Boy, they taste good after all those stale trees the beavers have been eating all winter!

As summer arrives, the family starts getting ready for a new litter. The beavers that were a year old last year are now two-year-old adults! They leave the lodge to find a mate, make their own lodge, and start a family. Last year's kits are now one year old. They will help their parents fix the lodge and care for the new litter.

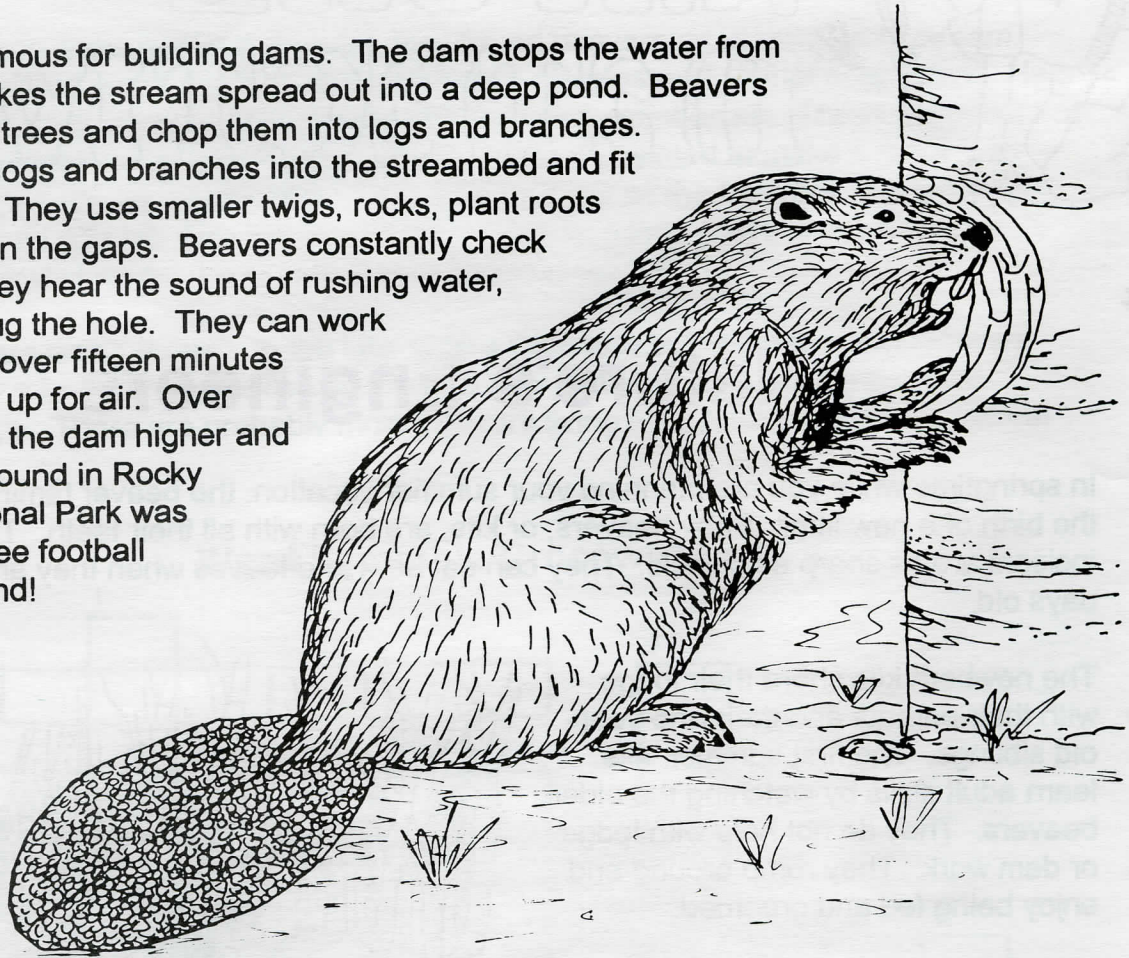


and Save

Pull Out

Construction Zone

Beavers are famous for building dams. The dam stops the water from flowing and makes the stream spread out into a deep pond. Beavers cut down small trees and chop them into logs and branches. They push the logs and branches into the streambed and fit them together. They use smaller twigs, rocks, plant roots and mud to fill in the gaps. Beavers constantly check their dam. If they hear the sound of rushing water, they quickly plug the hole. They can work underwater for over fifteen minutes without coming up for air. Over time they make the dam higher and wider. A dam found in Rocky Mountain National Park was longer than three football fields end-to-end!



Cycles of Change

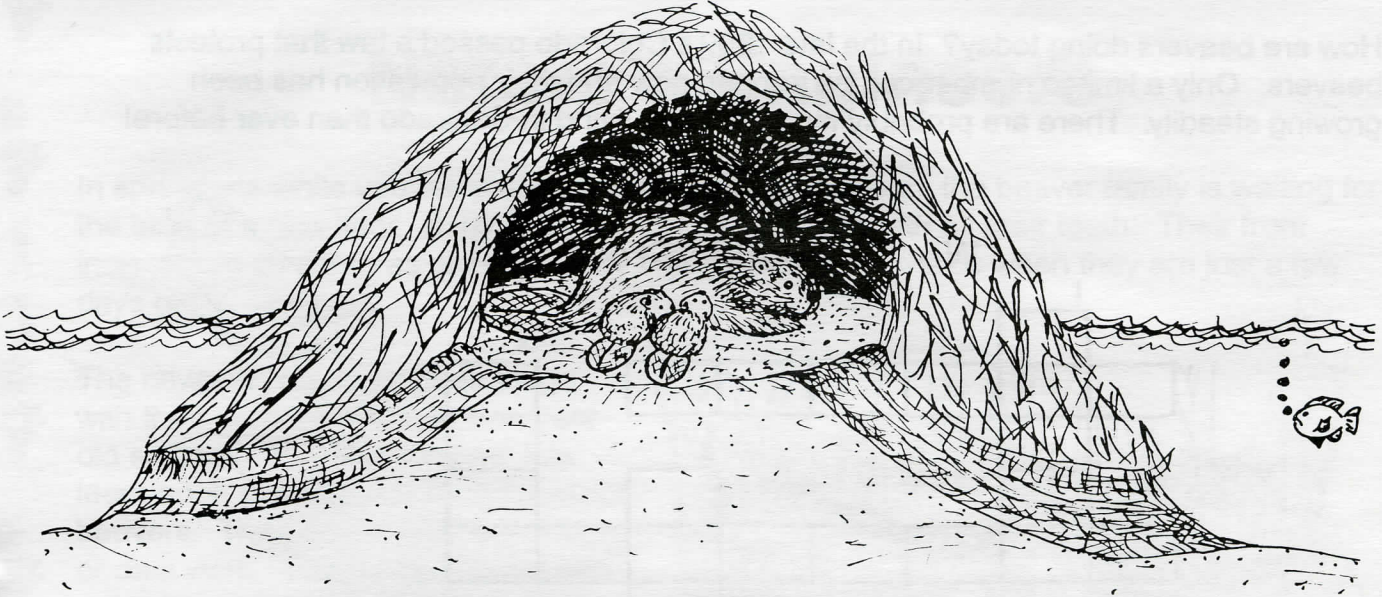
As the once dry land becomes a pond, the area is changed. The pond and nearby wetlands become a home for many new plants and animals. Over time, the beavers will harvest the trees closest to the water. When the beavers run out of trees near their pond they will move to a new home. For a while the pond will remain the same, but eventually the dam will break and water will start to flow through. The pond will drain and the stream will return to its normal size. The old beaver pond will become a rich fertile meadow. The "beaver meadow" will fill with grasses, shrubs and plants that provide lots of food for deer, moose and other animals. After many years trees will begin to grow. Gradually the wet meadow will become a forest and then beavers may return to start the whole cycle again.



Building a Lodge

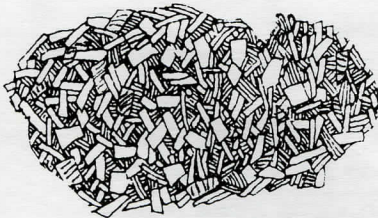
Beavers often build their homes where the water is quite deep. The beaver's lodge is built of mud, grass and sticks. Canals and underwater doorways lead to the lodge. Inside the lodge is a hollowed out room above the water line. A bed of small splinters of wood keeps the newborns and yearlings dry. There is a hole in the roof of the lodge to vent the inside.

The lodge is warm and cozy. In winter, you sometimes see steam rising through the vent. If there is ice on the surface of their pond, beavers can still swim to their winter pantry.



Are There Any Beavers Here?

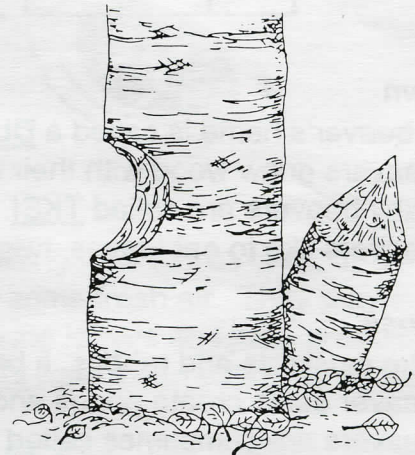
Beavers are nocturnal which means they are most active at night. Listen for a loud slap as you approach the water. This is a beaver smacking its tail on the water as a warning that someone is coming. Not all beavers build dams and lodges, so look for some of the following clues.



Beaver poop (actual size)
with woodchips in it -- ouch!



Beaver tracks
(rear 5-6 in. long, front 3 in. long)



Chewed tree trunk

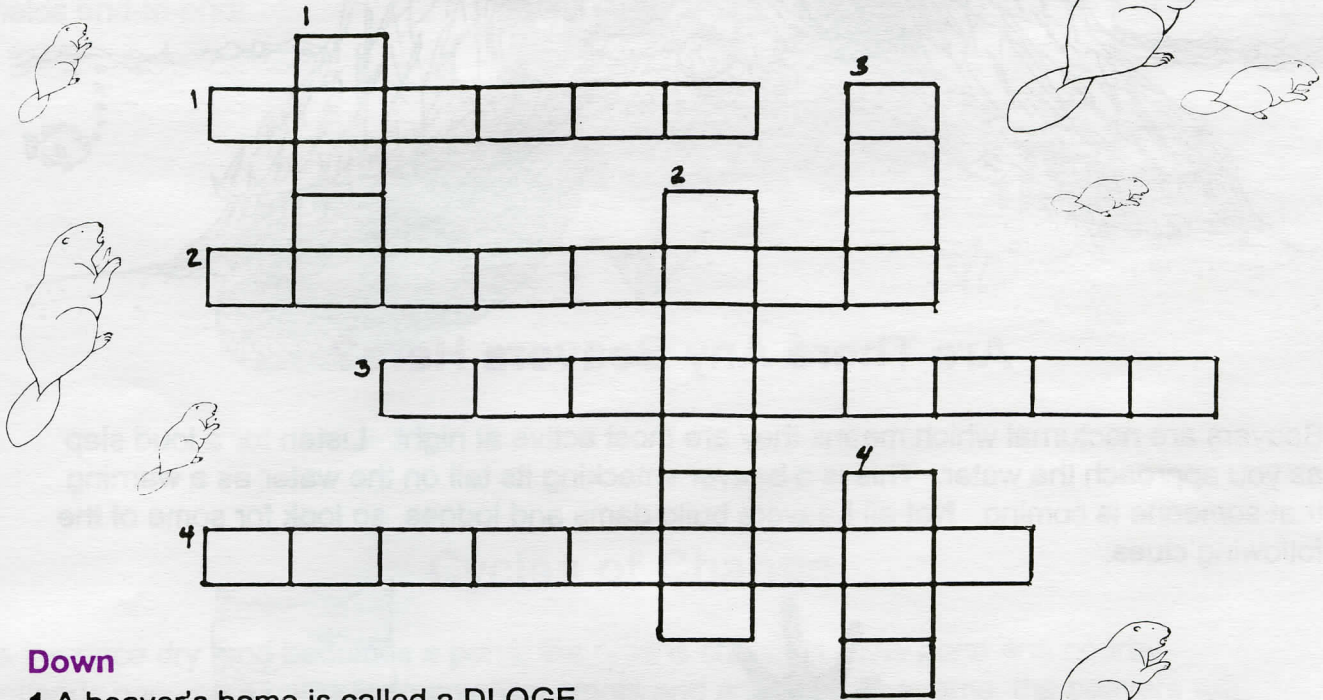


The Beaver: Past and Present

When Europeans came to North America they found beavers on almost every stream. However, a hundred years ago beavers had almost disappeared. What happened? Hats made of beaver pelts became fashionable with European gentlemen. These pelts were so valuable that people called them "brown gold." Trappers wanted to make a fortune by hunting as many beavers as possible. They killed almost all the beavers. Fortunately, fashions changed and silk hats became more fashionable than those made from beaver pelts. This probably saved the beaver from becoming extinct.

How are beavers doing today? In the late 1800s Colorado passed a law that protects beavers. Only a limited number can be trapped now and their population has been growing steadily. There are probably more beavers living in Colorado than ever before!

Word Scramble/Crossword



Down

- 1 A beaver's home is called a DLOGE.
- 2 Beavers gnaw wood with their large NSRICSIIO.
- 3 Baby beavers are called TKSI.
- 4 Beavers like to eat leaves, twigs and KRBA.

Across

- 1 Like muskrats and rabbits, a beaver is a TNROED.
- 2 Beaver dams create ponds and TNDWSELA.
- 3 Beavers are sometimes called the "ESIENREGS" of nature.
- 4 Usually only out at night, beavers are CNLANORTU.

Answers: Down: 1: LODGE 2: INCISORS 3: KITS 4: BARK Across: 1: RODENT 2: WETLANDS 3: ENGINEERS 4: NOCTURNAL

