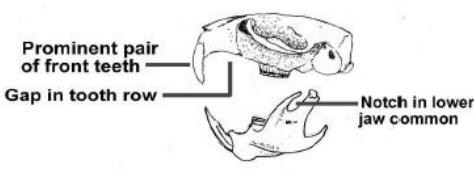
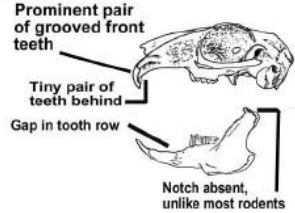
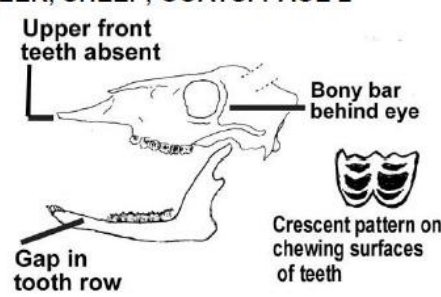

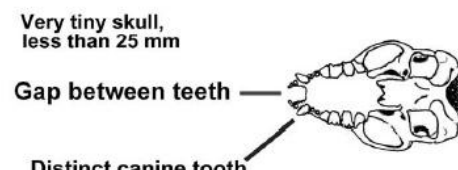
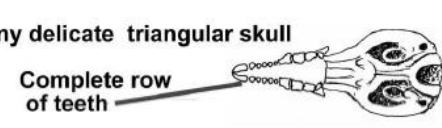


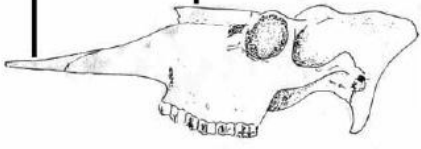
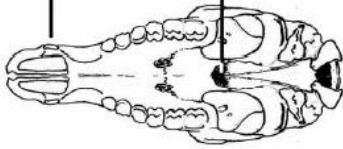
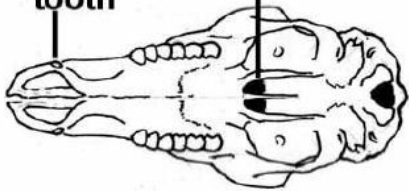

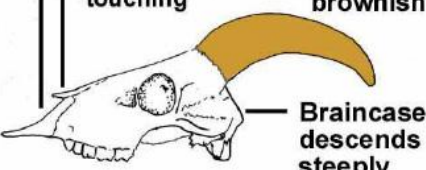

British Columbia Mammal Skulls. An Illustrated Nontechnical Guide

Peter Ommundsen

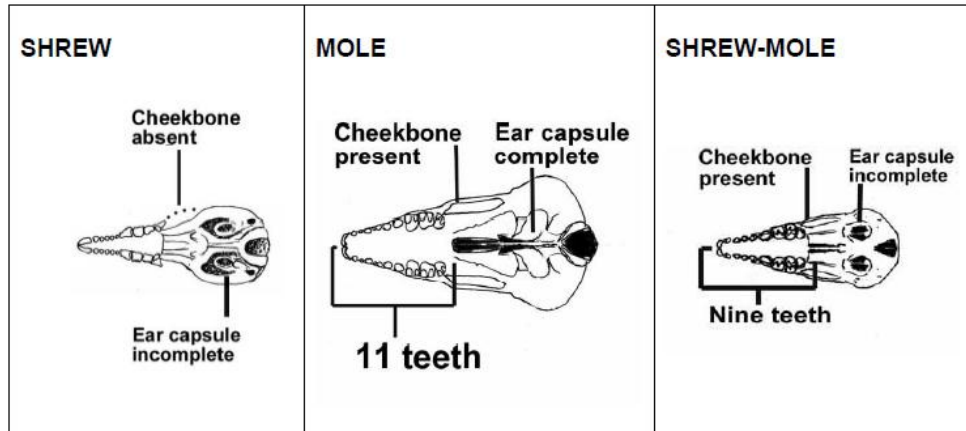
Match your specimen to **ONE** of the following **ON THIS PAGE**, then consult the page indicated.

<p>RODENTS: PAGE 9</p>  <p>Prominent pair of front teeth</p> <p>Gap in tooth row</p> <p>Notch in lower jaw common</p>	<p>RABBITS: PAGE 3</p>  <p>Prominent pair of grooved front teeth</p> <p>Tiny pair of teeth behind</p> <p>Gap in tooth row</p> <p>Notch absent, unlike most rodents</p>
<p>DEER, SHEEP, GOATS: PAGE 2</p>  <p>Upper front teeth absent</p> <p>Bony bar behind eye</p> <p>Gap in tooth row</p> <p>Crescent pattern on chewing surfaces of teeth</p>	<p>CARNIVORES AND OPOSSUM: PAGE 5</p> <p>Skull > 25 mm, usually medium to large</p>  <p>Prominent canine tooth in upper jaw (shown here) and in lower jaw</p>
<p>BATS: PAGE 4</p>  <p>Very tiny skull, less than 25 mm</p> <p>Gap between teeth</p> <p>Distinct canine tooth in upper jaw (shown here) and in lower jaw</p>	<p>SHREWS AND MOLES: PAGE 3</p>  <p>Tiny delicate triangular skull</p> <p>Complete row of teeth</p>

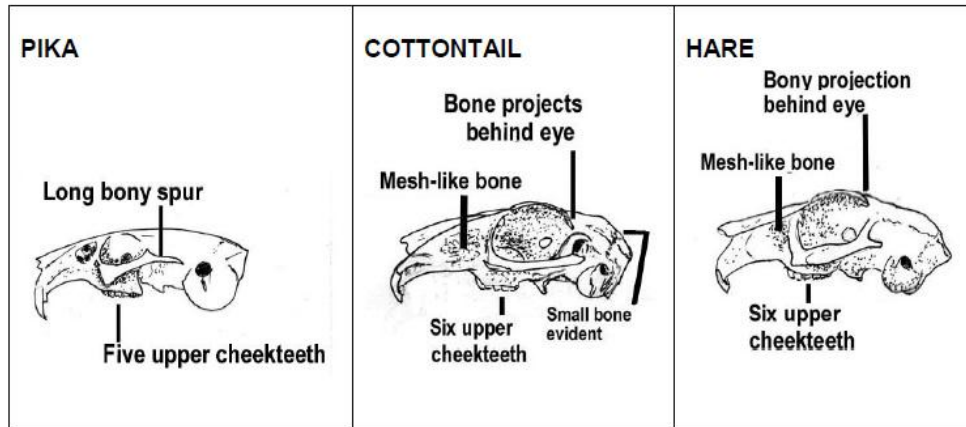
DEER, SHEEP, GOAT

<p>MOOSE</p> <p>Long flat upper jaw</p> <p>Nose bones shorter than tooth row</p>  A lateral view of a moose skull. The upper jaw is notably long and flat. The nose bones are short, ending before the first row of teeth. The skull is relatively narrow.	<p>ELK</p> <p>Small tooth</p> <p>Opening not divided</p>  A lateral view of an elk skull. The upper jaw is shorter than the moose's. The opening in the palate is a single, undivided space. There is a small, distinct tooth at the front of the upper jaw.
<p>CARIBOU</p> <p>Small tooth</p> <p>Opening divided</p>  A lateral view of a caribou skull. The upper jaw is shorter than the moose's. The opening in the palate is divided into two distinct spaces. There is a small, distinct tooth at the front of the upper jaw.	<p>DEER</p> <p>Narrow snout</p> <p>Small tooth absent</p>  A lateral view of a deer skull. The snout is very narrow and tapers to a point. There is no small tooth at the front of the upper jaw.
<p>MOUNTAIN SHEEP</p> <p>Bones usually touching</p> <p>Horns brownish</p> <p>Braincase descends steeply</p>  A lateral view of a mountain sheep skull. The skull bones are close together, often touching. The horns are curved and colored brownish. The braincase slopes downward steeply.	<p>MOUNTAIN GOAT</p> <p>Bones usually not touching</p> <p>Horns black</p> <p>Prominent braincase</p>  A lateral view of a mountain goat skull. The skull bones are separated, not touching. The horns are curved and colored black. The braincase is prominent and slopes downward.



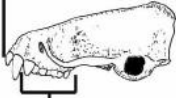




SHREWS AND MOLES



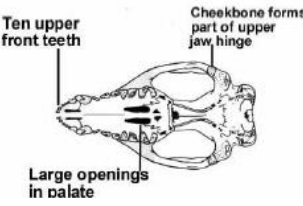
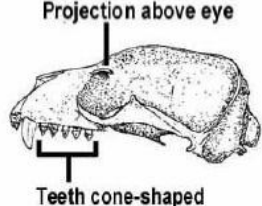
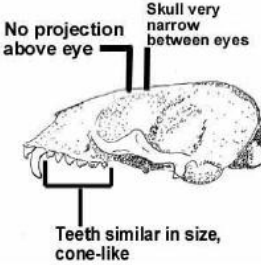
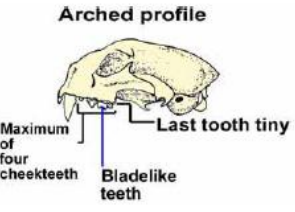
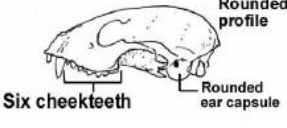
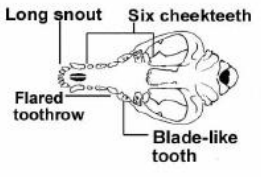
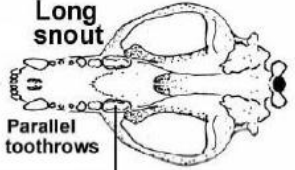
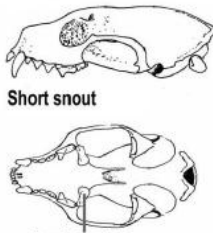
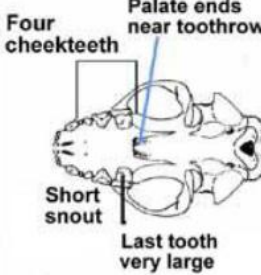
RABBITS AND PIKA



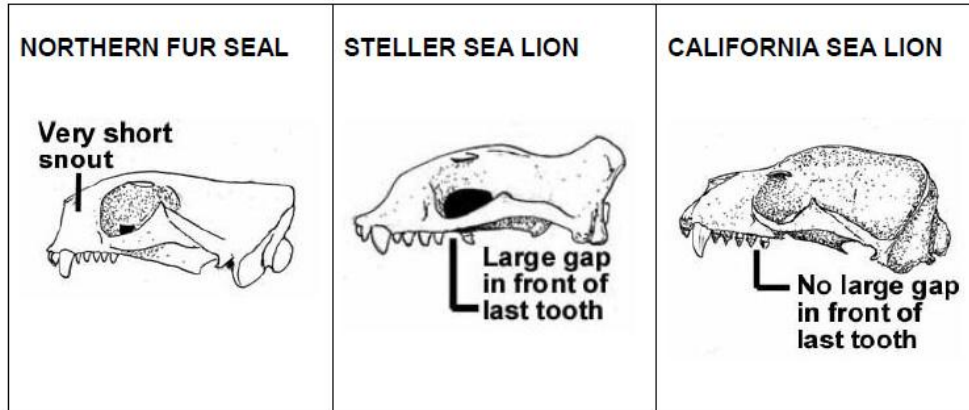
BATS

<p>MYOTIS BAT</p>  <p>Six cheek teeth Two small teeth</p>	<p>BIG BROWN BAT</p> <p>Total of four front teeth</p>  <p>Four cheekteeth</p>	<p>PALLID BAT</p> <p>Total of two front teeth</p>  <p>Four cheekteeth</p>
<p>HAIRY-TAILED BAT</p> <p>Short snout</p>  <p>Total of two front teeth Small tooth usually hidden from side view Four cheekteeth</p>	<p>SILVER-HAIRED BAT</p> <p>Depression Flattened profile</p>  <p>Five cheekteeth</p>	<p>SPOTTED BAT</p> <p>Projection on cheekbone Bulge in braincase</p>  <p>Five cheekteeth</p>
<p>TOWNSEND'S BIG EARED BAT</p> <p>Curved braincase</p>  <p>Five cheekteeth</p>		

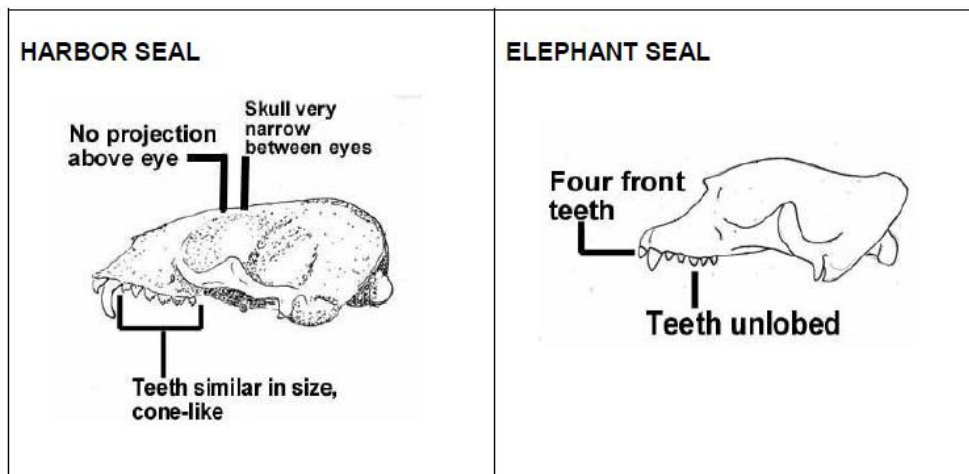
CARNIVORES AND OPOSSUM

<p>OPOSSUM</p>  <p>Ten upper front teeth</p> <p>Cheekbone forms part of upper jaw hinge</p> <p>Large openings in palate</p>	<p>SEA LIONS: PAGE 6</p>  <p>Projection above eye</p> <p>Teeth cone-shaped</p>	<p>FUR SEALS: PAGE 6</p>  <p>No projection above eye</p> <p>Skull very narrow between eyes</p> <p>Teeth similar in size, cone-like</p>
<p>CAT FAMILY: PAGE 7</p>  <p>Arched profile</p> <p>Maximum of four cheekteeth</p> <p>Bladelike teeth</p> <p>Last tooth tiny</p>	<p>RACCOON</p>  <p>Rounded profile</p> <p>Six cheekteeth</p> <p>Rounded ear capsule</p>	<p>DOG FAMILY: PAGE 7</p>  <p>Long snout</p> <p>Six cheekteeth</p> <p>Flared toothrow</p> <p>Blade-like tooth</p>
<p>BEARS</p>  <p>Large skull</p> <p>Long snout</p> <p>Parallel toothrows</p> <p>Last tooth elongate. If > 31 mm = Grizzly Bear, otherwise Black Bear</p>	<p>WEASEL FAMILY: PAGE 8</p>  <p>Flattened braincase</p> <p>Short snout</p> <p>Last tooth perpendicular to toothrow</p>	<p>SKUNK</p>  <p>Four cheekteeth</p> <p>Palate ends near toothrow</p> <p>Short snout</p> <p>Last tooth very large</p>

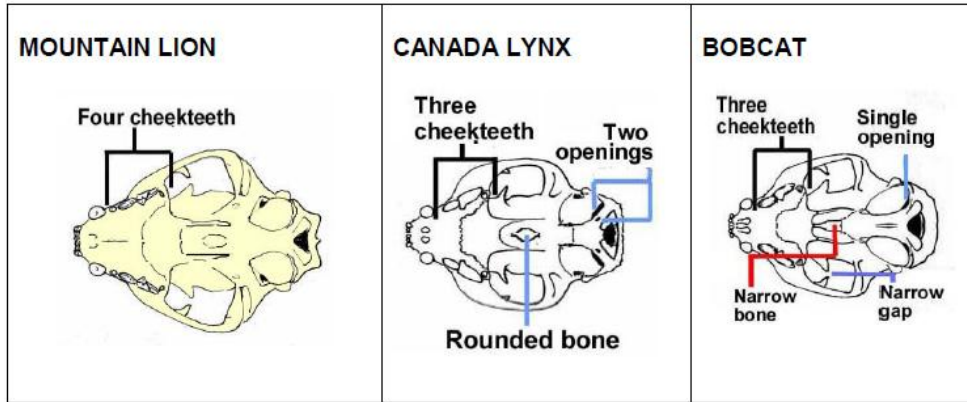
SEA LIONS



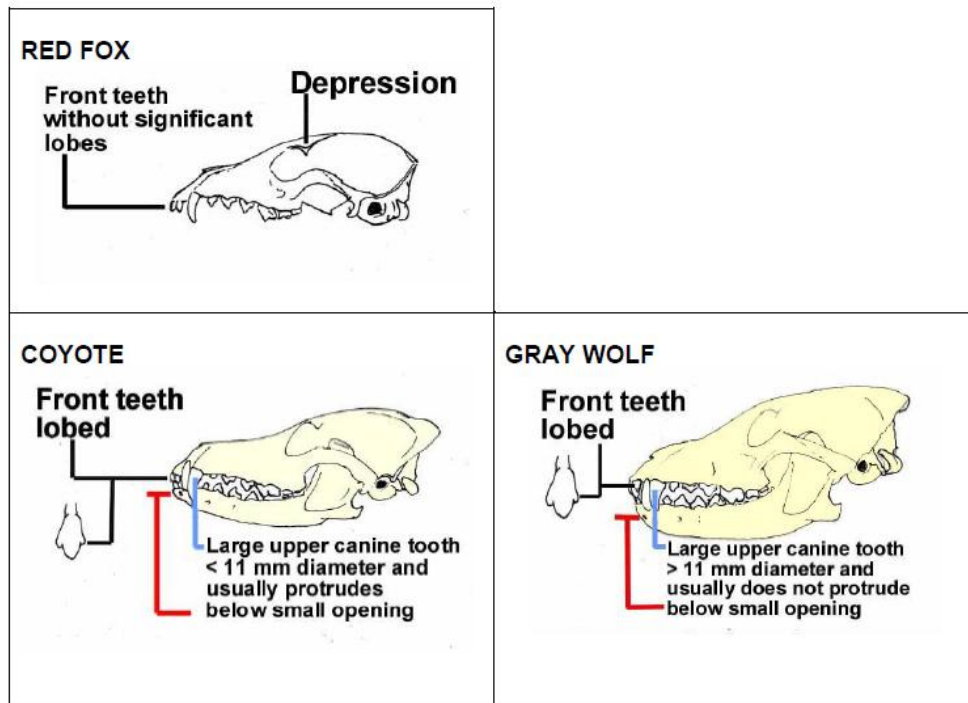
FUR SEALS



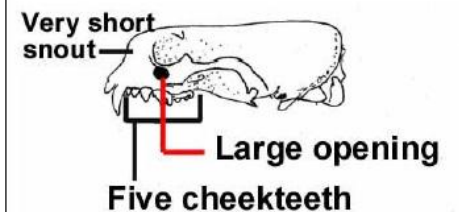
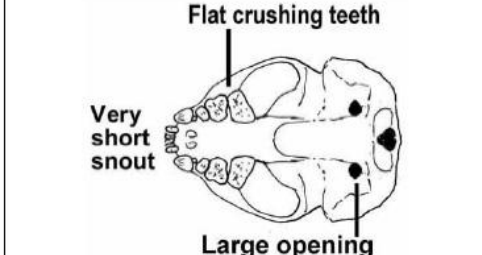
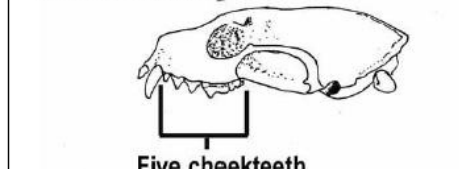
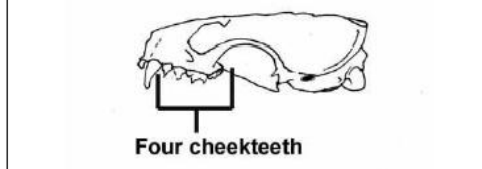
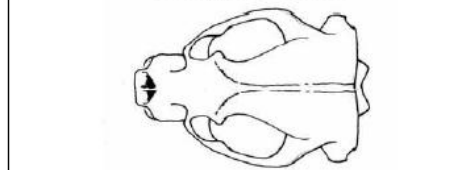
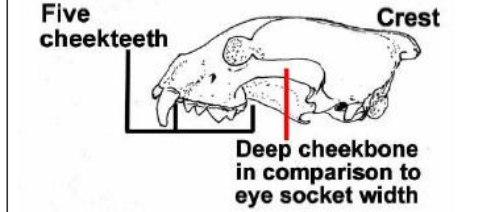
CATS



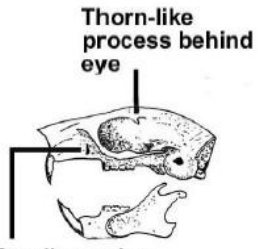
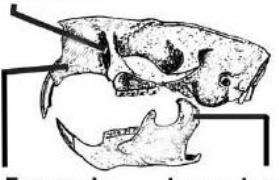
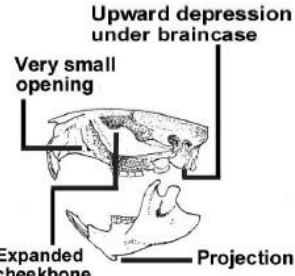
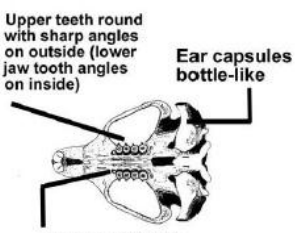
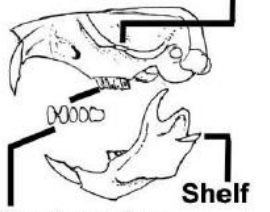

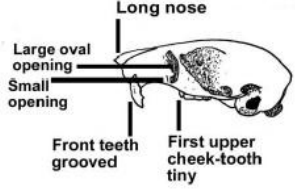
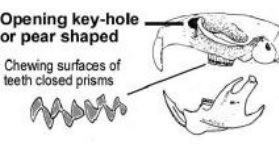
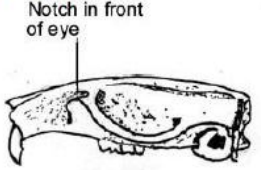
DOGS



WEASEL FAMILY

<p>RIVER OTTER</p>  <p>Very short snout</p> <p>Large opening</p> <p>Five cheekteeth</p>	<p>SEA OTTER</p>  <p>Flat crushing teeth</p> <p>Very short snout</p> <p>Large opening</p>
<p>MARTEN AND FISHER</p> <p>Fisher usually > 90 mm</p>  <p>Five cheekteeth</p>	<p>MINK AND WEASELS</p>  <p>Four cheekteeth</p>
<p>BADGER</p> <p>Triangular shape</p>  <p>Triangular shape</p>	<p>WOLVERINE</p>  <p>Five cheekteeth</p> <p>Crest</p> <p>Deep cheekbone in comparison to eye socket width</p>

RODENTS

<p>SQUIRRELS: PAGE 10</p>  <p>Thorn-like process behind eye</p> <p>Small opening or passage low on skull</p>	<p>PORCUPINE</p> <p>Huge opening, larger than opening at back of braincase</p>  <p>Forward-projecting tooth-bearing bone</p> <p>Large jaw process</p>	<p>BEAVER</p>  <p>Upward depression under braincase</p> <p>Very small opening</p> <p>Expanded cheekbone</p> <p>Projection</p>
<p>MOUNTAIN BEAVER</p>  <p>Upper teeth round with sharp angles on outside (lower jaw tooth angles on inside)</p> <p>Ear capsules bottle-like</p> <p>First cheek-tooth a tiny peg</p>	<p>POCKET GOPHER</p>  <p>Tiny cheekbone segment</p> <p>Shelf</p> <p>Chewing surface of first upper cheek-tooth hourglass-shaped</p>	<p>POCKET MOUSE</p>  <p>Long tubular nose</p> <p>Huge ear capsules almost meet</p> <p>Grooved teeth</p>
<p>JUMPING MOUSE</p>  <p>Long nose</p> <p>Large oval opening</p> <p>Small opening</p> <p>Front teeth grooved</p> <p>First upper cheek-tooth tiny</p>	<p>VOLES AND LEMMINGS: PAGE 11</p>  <p>Opening key-hole or pear shaped</p> <p>Chewing surfaces of teeth closed prisms</p>	<p>RATS AND MICE: PAGE 12</p>  <p>Notch in front of eye</p>

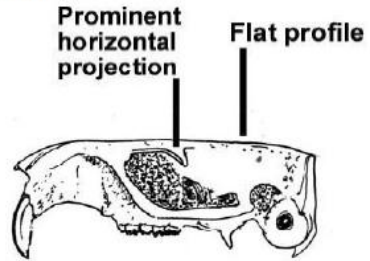
SQUIRRELS

CHIPMUNK

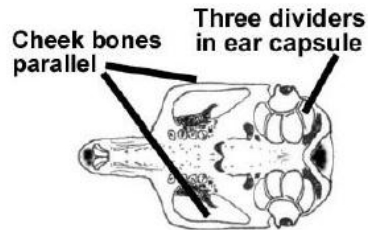


Distinct hole,
not canal, as seen
from the front

MARMOT

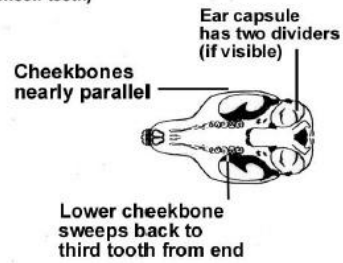


RED SQUIRREL



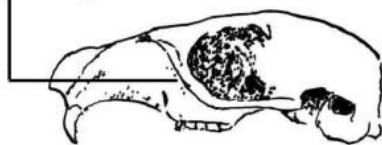
GRAY SQUIRREL

(Fox squirrel
has four
cheek-teeth)



GROUND SQUIRREL

Cheekbone
rises at about
40 degrees



Cheekbones not parallel


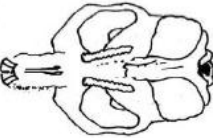

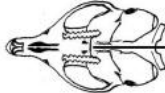
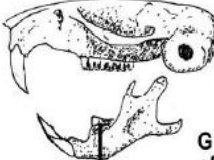
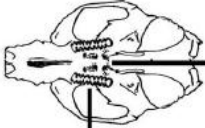
FLYING SQUIRREL

V-shape above eye

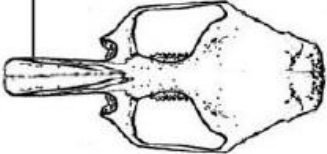

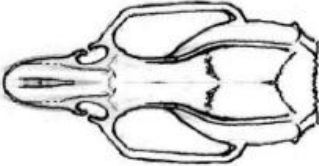

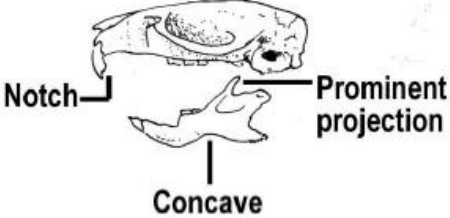
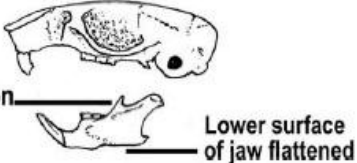


Abrupt rise
of cheekbone,
about 60 degrees

MUSKRAT, VOLES AND LEMMINGS

<p>MUSKRAT</p> <p>Large rat size, > 50 mm</p> 	<p>BOG LEMMING</p> <p>Grooved front teeth</p> 
<p>BROWN LEMMING</p> <p>Large flare in cheekbone</p>  <p>Grooves in sides of teeth deepest on outside</p>	<p>RED-BACKED VOLE</p>  <p>End of palate forms a shelf</p>
<p>HEATHER VOLE</p>  <p>Grooves in sides of lower teeth deepest on inside of jaw</p>	<p>MEADOW VOLE</p>  <p>Median ridge on palate</p> <p>Depth of grooves on sides of teeth about equal on inside and outside</p>

RATS AND MICE

<p>WOOD RAT</p> <p>Rat-sized skull, >40 mm</p> <p>Long narrow snout</p>  <p>Chewing surfaces of teeth with enamel loops</p> 	<p>BROWN RAT</p> <p>Rat size, > 35 mm</p> <p>Shorter nose</p>  <p>Chewing surfaces of teeth cusped</p>
<p>HARVEST MOUSE</p> <p>Grooved teeth</p> 	<p>HOUSE MOUSE</p>  <p>Notch</p> <p>Prominent projection</p> <p>Concave</p>
<p>DEER MOUSE</p>  <p>Low projection</p> <p>Lower surface of jaw flattened</p>	