
Shrub-Steppe Species Cards (S³)

Interactive Shrub-Steppe Species Cards (S³)

To use with your class we recommend that you color-copy the set of 42 S³ cards on card stock, laminate (for durability) and then cut to size.

For the Mini Shrub-Steppe Species Cards, we recommend that you make a copy of the set (color or gray scale) for each of your students. Your students can cut the cards apart and place them in an envelope or small plastic bag that they keep in their science notebook.

Red-tailed Hawk



Buteo jamaicensis

Brief Note: A large, broad-winged hawk with a wide tail of red feathers, easily seen when soaring.

Eats:	
mice	toads
birds	snakes
rabbits	burrowing owl

No natural predators

Great Basin Spadefoot Toad

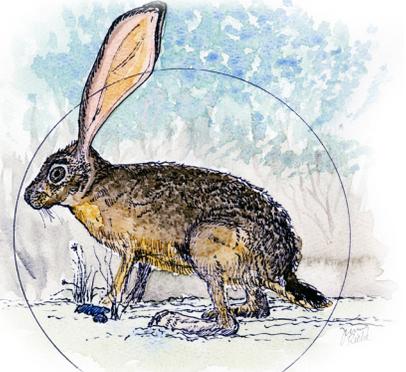


Spea intermontana

Brief Note: A small toad with bumpy skin which is grey or olive green in color.

Eats:	Eaten By:
spiders	coyote
earthworms	hawks
millipedes	badger
centipedes	snakes

Black-tailed Jackrabbit



Lepus californicus

Brief Note: The black-tailed jackrabbit is long-legged, lean and weighs 3-7 lbs.

Eats:	Eaten By:
leaves	coyote
forbs	golden eagle
grasses	snakes
sagebrush	hawks
	badger
	bobcat

Sage Grouse



Centrocercus urophasianus

Brief Note: A large grouse with short, rounded wings, a blackish colored belly and long pointed tail feathers.

Eats:	Eaten By:
sagebrush leaves	coyote
seeds	hawks
insects	snakes
spiders	golden eagle
harvester ants	badger
yarrow	
balsamroot	

Burrowing Owl

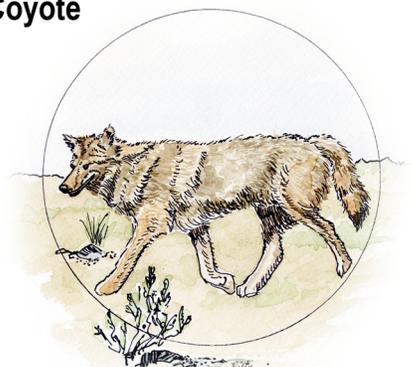


Athene cunicularai

Brief Note: A small owl living in open country that can often be seen standing outside its burrow or on a post.

Eats:	Eaten By:
insects	coyote
mice	snakes
spiders	hawks
lizards	badger

Coyote



Canis latrans

Brief Note: Coyotes are generally grayish brown with a bushy tail weighing up to 55 lbs.

Eats:	
birds	toads
mice	insects
rabbits	forbs
snakes	fruit
dead animals	

Eaten By:
golden eagle

Great Basin Pocket Mouse



Perognathus parvus

Brief Note: This long-tailed, sandy colored mouse is common in dry shrublands with sandy soil.

Eats:

- seeds
- fruit
- forbs
- decaying matter
- insects

Eaten By:

- burrowing owls
- hawks
- snakes
- coyote
- loggerhead shrike

Valley Grasshopper



Oedaleonotus enigma

Brief Note: Those species that make noises usually do so by rubbing the hind legs against their forewings or abdomen or by snapping the wings in flight.

Eats:

- forbs
- shrubs
- grasses
- sedges
- lichens

Eaten By:

- hawks
- mice
- burrowing owl
- shrike

Northern Pocket Gopher



Thomomys talpoides

Brief Note: The pocket gopher uses its sensitive tail to navigate backward within a burrow.

Eats:

- roots
- grasses
- forbs
- seeds

Eaten By:

- coyote
- badger
- hawks
- snakes
- shrike

Mule Deer



Odocoileus hemionus

Brief Note: The mule deer gets its name from its large mule-like ears, which usually are about one-quarter larger than those of the white-tailed deer.

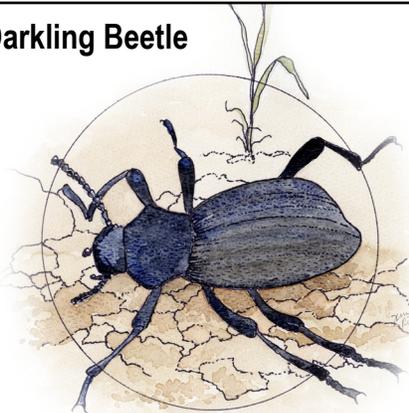
Eats:

- twigs
- leaves
- shrubs
- grasses
- forbs

Eaten By:

- coyote
- bobcat

Darkling Beetle



Eleodes hispilabris

Brief Note: If disturbed, darkling beetles assume a head down and tail up position, and if handled roughly, they emit a dark-colored, foul-smelling fluid.

Eats:

- dead plants
- leaves
- grasses
- forbs

Eaten By:

- coyote
- lizards
- birds
- badger
- burrowing owl

Bobcat



Felis rufus

Brief Note: This carnivore with the “bobbed” tail has a supple, flexible body and strong legs for climbing, pouncing and rapid acceleration.

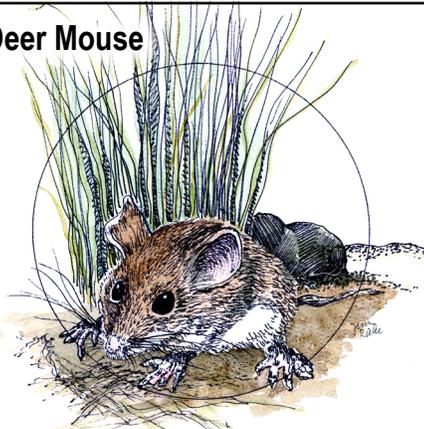
Eats:

- rabbits
- mice
- young deer
- gophers

Eaten By:

- coyote
- eagle

Deer Mouse



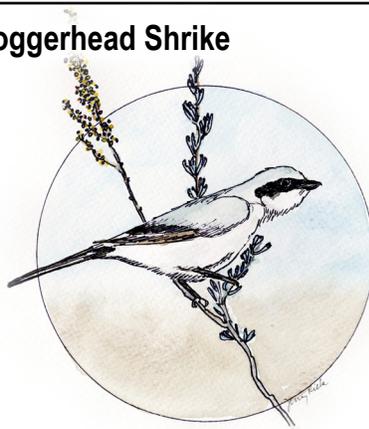
Peromyscus maniculatus

Brief Note: This white-footed mouse with a white belly has a tail as long as its head and body.

Eats:
seeds insects spiders

Eaten By:
*coyote hawks
snakes owls
bobcat badger
shrike*

Loggerhead Shrike



Lanius ludovicianus

Brief Note: This songbird behaves like a hawk, hunting smaller animals which it impales on thorns or barbed wire.

Eats:
*insects
mice
spiders
small birds
lizards*

Eaten By:
*coyote
rattlesnake*

Gopher Snake



Pituophis catenifer

Brief Note: In winter, gopher snakes hibernate, retreating to shared dens sometimes joined by rattlesnakes, or racers.

Eats:
*mice
rabbits
birds
insects*

Eaten By:
*coyote
hawks
badger*

Badger



Taxidea taxus

Brief Note: The burrows that badgers live in are called *setts* which they fiercely protect from larger predators.

Eats:
*pocket gopher burrowing owl
shrews ground birds
mice voles*

No natural predators

Sage Sparrow



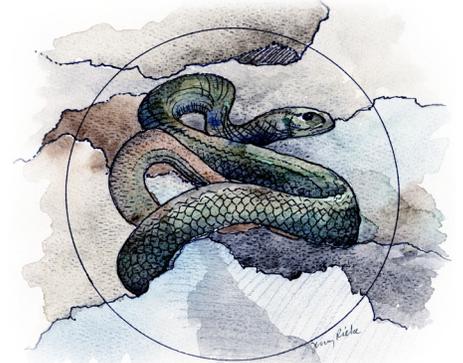
Amphispiza belli

Brief Note: When this sparrow arrives in early March from southern deserts, look for it in mature stands of big sagebrush.

Eats:
*seeds
insects
spiders*

Eaten By:
*shrikes
snakes
coyote*

Western Yellow-Bellied Racer



Coluber constrictor

Brief Note: Racers are built for speed and have excellent vision they use when hunting during the day.

Eats:
*mice
birds
snakes
gophers
insects*

Eaten By:
*coyote
hawks
badgers*

Vagrant Shrew

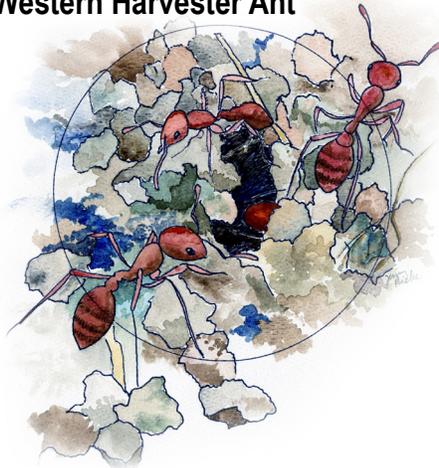


Sorex vagrans

Brief Note: This small mammal, which is active year round, uses echolocation to orient itself in the dark.

Eats:	Eaten By:
<i>insects</i>	<i>owls</i>
<i>spiders</i>	<i>badgers</i>
<i>earthworms</i>	<i>coyote</i>

Western Harvester Ant



Pogonomyrmex salinus

Brief Note: You can spot harvester ants next to a mound of small pebbles surrounding the hole.

Eats:	Eaten By:
<i>seeds</i>	<i>lizards</i>
<i>insects parts</i>	<i>snakes</i>
	<i>insects</i>
	<i>spiders</i>
	<i>birds</i>

Sagebrush Lizard



Sceloporus graciosus

Brief Note: Often found in stands of sagebrush, this lizard is also called "spiny" lizard for the small scales found on its back.

Eats:	Eaten By:
<i>ants</i>	<i>snakes</i>
<i>beetles</i>	<i>hawks</i>
<i>grasshoppers</i>	<i>shrike</i>
<i>spiders</i>	

Little Brown Bat



Myotis lucifugus

Brief Note: It is estimated that one little brown bat can eat up to 600 mosquitoes in an hour.

Eats:	Eaten By:
<i>insects</i>	<i>snakes</i>

Hera Buckmoth "Sagebrush Moth"



Hemileuca hera hera

Brief Note: The adult moth does not eat but the caterpillars feed on the host plant, build loose cocoons and overwinter in leaf litter or soft soil.

Eats:	Eaten By:
<i>sagebrush</i>	<i>birds</i>
<i>rabbitbrush</i>	<i>owls</i>
	<i>bats</i>

DECOMPOSER

Nematodes



Soil microbes feed on the remains or wastes of dead plants and animals to break them down into carbon dioxide and soil nutrients.

Black Widow Spider



Latrodectus mactans

Brief Note: The female Black Widow is dangerous to humans, not the male or young. The shiny black female is identified by the reddish hour glass on her abdomen.

Eats:
insects
spiders

Eaten By:
birds
insects

Western Meadowlark



Sturnella neglecta

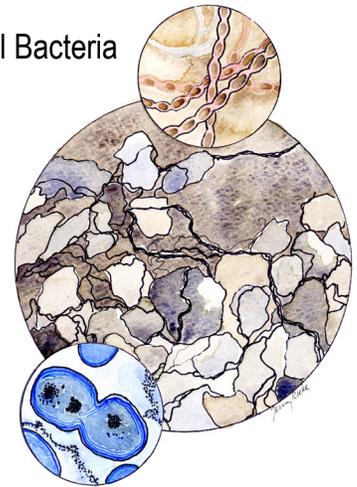
Brief Note: The male western meadowlark uses its distinctive flute-like call to claim its territory, fighting and chasing other males who invade .

Eats:
caterpillars
grasshoppers
seeds
ants
beetles

Eaten By:
coyote
hawks
owls
snakes

DECOMPOSER

Soil Bacteria



Soil bacteria feed on the remains or wastes of dead plants and animals to break them down into carbon dioxide and soil nutrients. Some bacteria help bind soil particles together.

Western Rattlesnake



Crotalus viridis

Brief Note: The tail of the Western rattlesnake can vibrate from 20-100 times per second. The warmer the snake, the faster the vibration.

Eats:
birds
snakes
mice
lizards
voles

Eaten By:
eagle
hawks

Golden Eagle



Aquila chrysaetos

Brief Note: The Golden Eagle is one of only three American hawks to have legs feathered all the way to its toes.

Eats:
rabbits
birds
insects
snakes

Eaten By:
mice
coyote
gophers

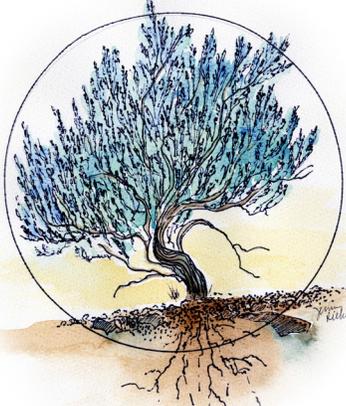
No natural predators

Biotic Crust



A thin layer of mosses, lichens, algae and bacteria are organisms that form a biotic layer over uncovered areas between shrubs, grasses, and flowering plants. They are usually found in undisturbed arid and semi-arid lands of the world, including the shrub-steppe ecosystem of the Columbia Basin.

Big Sagebrush



Artemisia tridentata 6-8 feet tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|----------------------|
| Provides: | Eaten By: |
| flowers | birds |
| leaves | grasshoppers |
| nectar | moths (caterpillars) |
| woody stems | deer |
| | jackrabbit |
| | beetles |

Bluebunch Wheatgrass



Pseudoroegneria spicata 2-3 feet tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|------------------|
| Provides: | Eaten By: |
| seeds | birds |
| vegetation | deer |
| | jackrabbits |
| | gophers |
| | mice |
| | beetles |

Sandberg's Bluegrass



Poa secunda 5 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|------------------|
| Provides: | Eaten By: |
| seeds | birds |
| vegetation | deer |
| | jackrabbits |
| | gophers |
| | mice |
| | beetles |

Gray Rabbitbrush



Ericameria nauseosa 2-4 feet tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|----------------------|
| Provides: | Eaten By: |
| flowers | birds |
| leaves | grasshoppers |
| nectar | moths (caterpillars) |
| woody stems | deer |
| | jackrabbit |
| | beetles |

Yarrow



Achillea millefolium 12-18 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|----------------------|
| Provides: | Eaten By: |
| flowers | birds |
| leaves | grasshoppers |
| nectar | moths (caterpillars) |
| vegetation | deer |
| | jackrabbit |
| | beetles |

Carey's Balsamroot

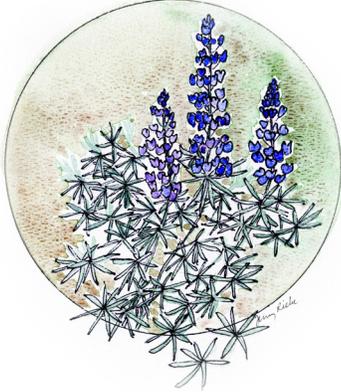


Balsamorhiza careyana
12 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

- | | |
|------------------|----------------------|
| Provides: | Eaten By: |
| flowers | birds |
| leaves | grasshoppers |
| nectar | moths (caterpillars) |
| vegetation | mice |
| seeds | jackrabbits |
| | beetles |

Lupine



Lupinus spp. 20 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

Provides:
flowers
nectar
vegetation
leaves
seeds

Eaten By:
grasshoppers
mice
birds
beetles

Cheatgrass



Bromus tectorum 8-12 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

Provides:
seeds
vegetation

Eaten By:
ants
mice
grasshoppers
gophers

Indian Ricegrass



Achnatherum hymenoides
12-18 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

Provides:
seeds
vegetation

Eaten By:
mice
deer
jackrabbits
birds
gophers

Antelope Bitterbrush



Purshia tridentata 3-4 feet tall

Plants produce their own food from sun, air, water, soil & minerals.

Provides:
flowers
leaves
nectar
vegetation

Eaten By:
deer
grasshoppers
jackrabbit
mice
beetles

Long-leaf Phlox



Phlox longifolia 10 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

Provides:
flowers
leaves
nectar
vegetation

Eaten By:
beetles
grasshoppers
moths (caterpillars)

Snow Buckwheat



Eriogonum niveum 12-18 inches tall

Plants produce their own food from sun, air, water, soil & minerals.

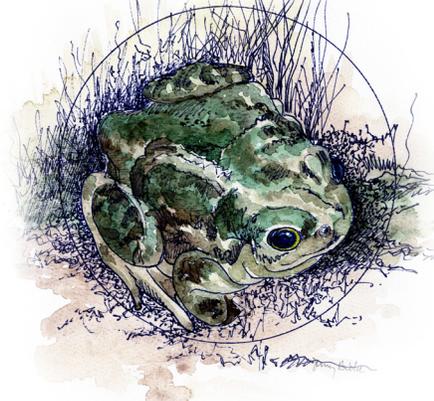
Provides:
flowers
leaves
nectar
vegetation
seeds

Eaten By:
birds
grasshoppers
ants
mice
beetles

Red-tailed Hawk



Great Basin Spadefoot Toad



Black-tailed Jackrabbit



Sage Grouse



Burrowing Owl



Coyote



Great Basin Pocket Mouse



Valley Grasshopper



Northern Pocket Gopher



Mule Deer



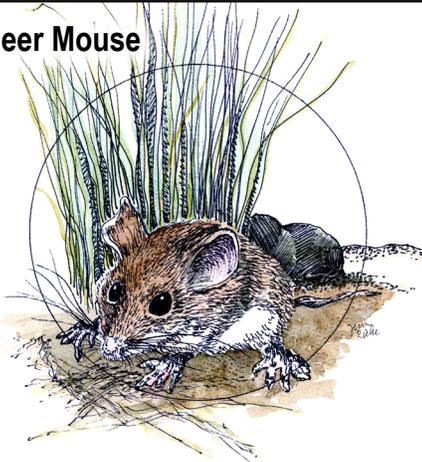
Darkling Beetle



Bobcat



Deer Mouse



Loggerhead Shrike



Gopher Snake



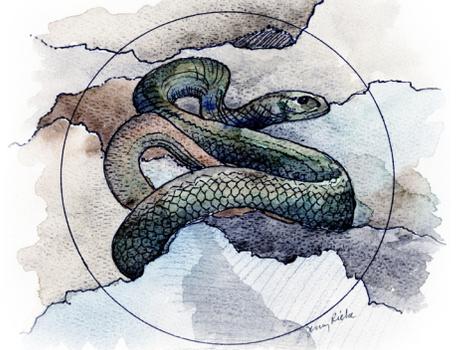
Badger



Sage Sparrow



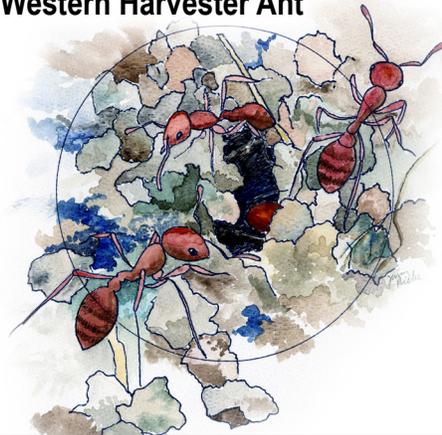
Western Yellow-Bellied Racer



Vagrant Shrew



Western Harvester Ant



Sagebrush Lizard



Little Brown Bat

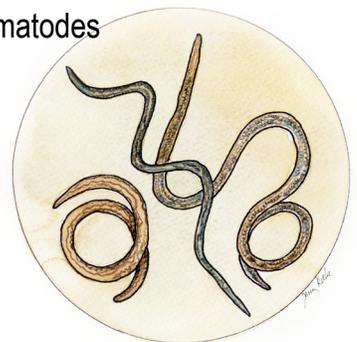


Hera Buckmoth "Sagebrush Moth"



DECOMPOSER

Nematodes



Black Widow Spider

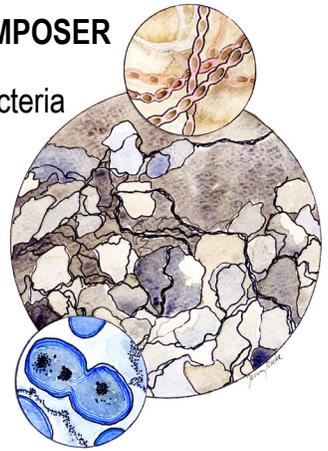


Western Meadowlark



DECOMPOSER

Soil Bacteria



Western Rattlesnake



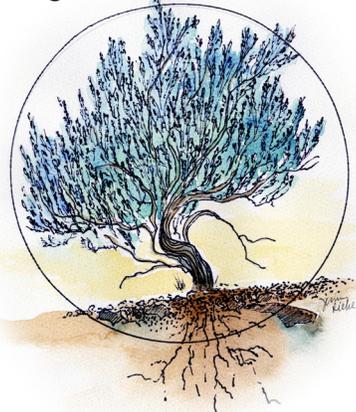
Golden Eagle



Biotic Crust



Big Sagebrush



Bluebunch Wheatgrass



Sandberg's Bluegrass



Gray Rabbitbrush



Yarrow



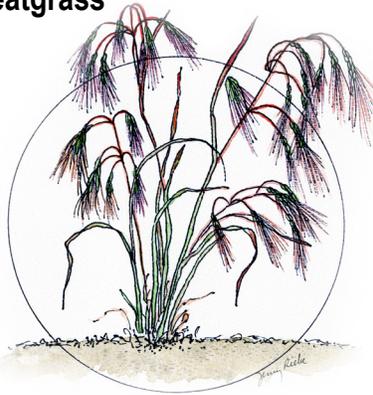
Carey's Balsamroot



Lupine



Cheatgrass



Indian Ricegrass



Antelope Bitterbrush



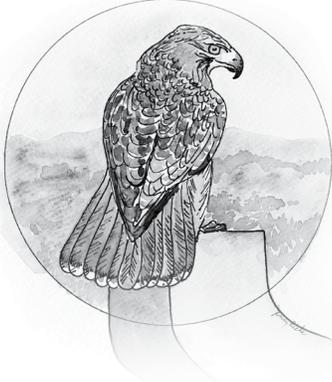
Long-leaf Phlox



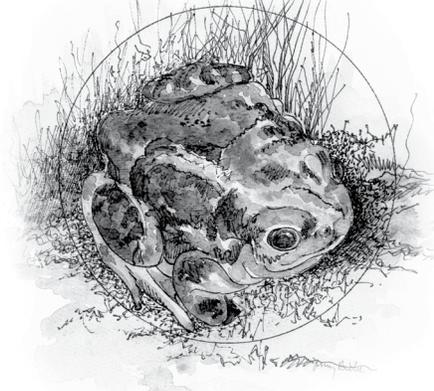
Snow Buckwheat



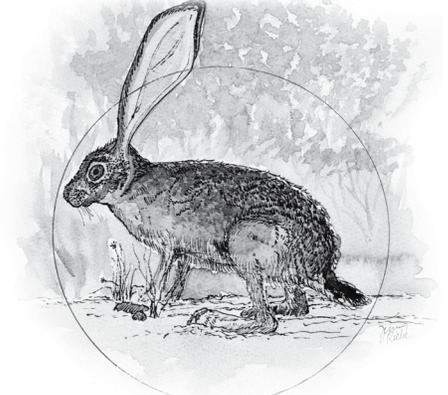
Red-tailed Hawk



Great Basin Spadefoot Toad



Black-tailed Jackrabbit



Sage Grouse



Burrowing Owl



Coyote



Great Basin Pocket Mouse



Valley Grasshopper



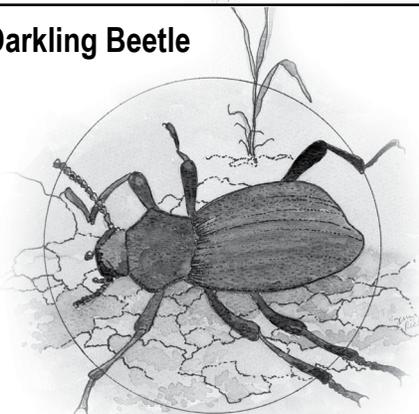
Northern Pocket Gopher



Mule Deer



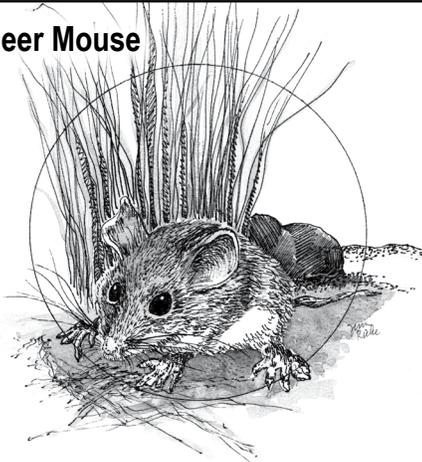
Darkling Beetle



Bobcat



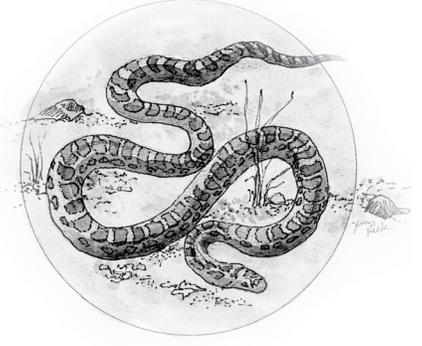
Deer Mouse



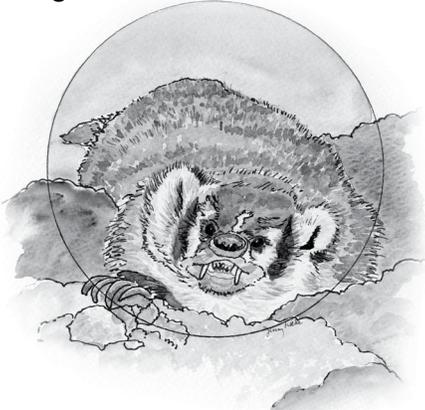
Loggerhead Shrike



Gopher Snake



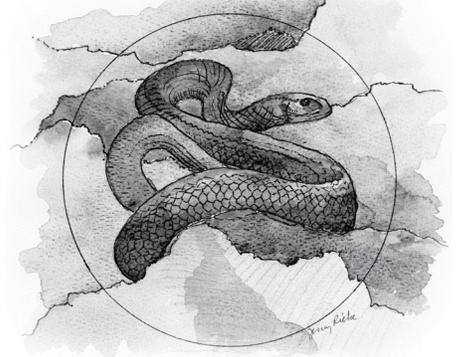
Badger



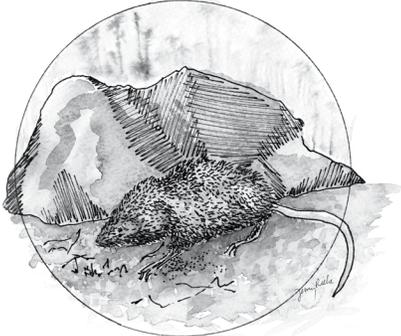
Sage Sparrow



Western Yellow-Bellied Racer



Vagrant Shrew



Western Harvester Ant



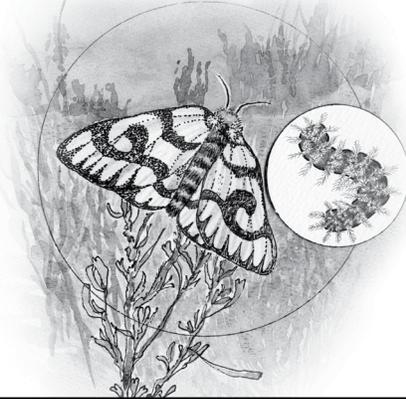
Sagebrush Lizard



Little Brown Bat

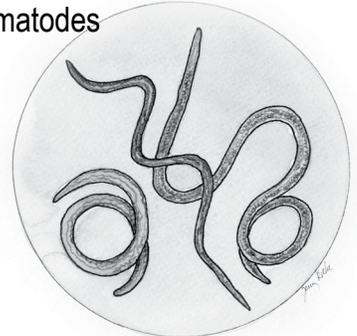


Hera Buckmoth "Sagebrush Moth"



DECOMPOSER

Nematodes



Black Widow Spider

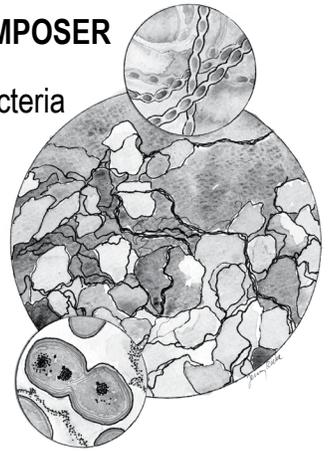


Western Meadowlark

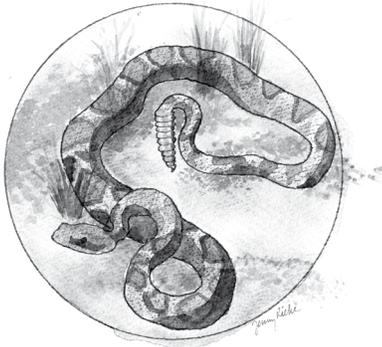


DECOMPOSER

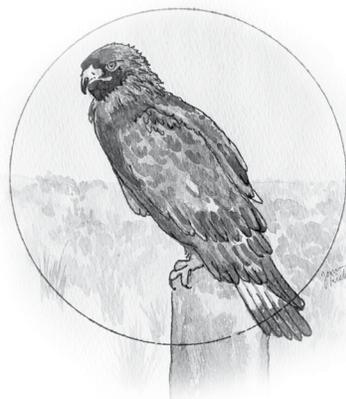
Soil Bacteria



Western Rattlesnake



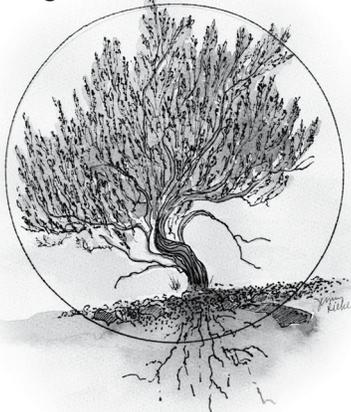
Golden Eagle



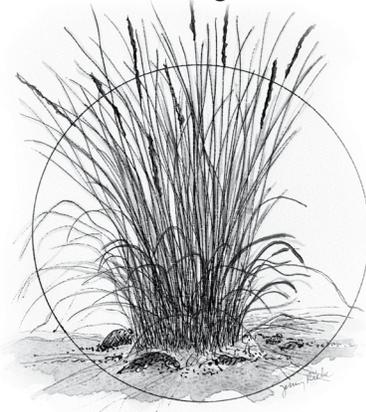
Biotic Crust



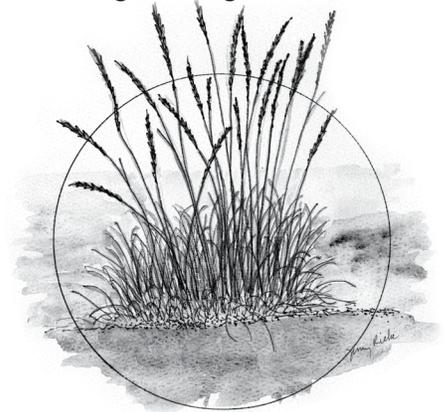
Big Sagebrush



Bluebunch Wheatgrass



Sandberg's Bluegrass



Gray Rabbitbrush



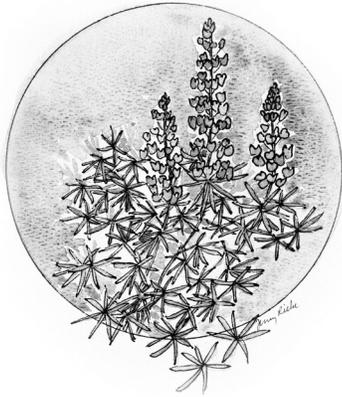
Yarrow



Carey's Balsamroot



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