## WHEP Lesson 3 Notes: More wildlife

Animal	Diet	Water	Cover	Skull/Specimen
Eastern cottontail	forbs & grasses, browse, soft mast (spring), bark & shrubs of trees (winter), buds	From diet	grasses, burrows	Q inch 1/2 1 2 3
Eastern fox squirrel	a variety of hard mast, acorns, seeds, tree buds and flowers, mushrooms, soft mast, eggs, and corn	necessary water generally is obtained through diet, but freestanding water may be used in late summer	mature hardwood and pine forest, small openings, woodlands, and savannas; nest in tree cavities or build a nest of twigs and leaves	ртартартартартартартартартартартартартар
Eastern gray squirrel	hard & soft mast, seeds, grains, bark, buds, mushrooms, bird eggs	From diet	trees, cavities, leaf nests	Same as above.
American beaver	primarily bark from shrubs and trees; also some forbs and grasses	prefer slow moving or still water at least 5 feet deep (to allow movement under water)	bottomland riparian areas that can be dammed to provide still water with sufficient depth	
Common Muskrat	roots, tubers, and green shoots of emergent aquatic vegetation, such as cattails and bulrushes	necessary water obtained from diet	primarily shallow-water wetlands with a mixture of open water and emergent aquatic vegetation; den in lodges built from cattails and bulrushes; loaf on floating logs or tops of lodges	Control 1 2 Smaller than beaver skull

Mink	rabbits, mice, muskrats, crayfish, snakes, and birds	necessary water probably obtained through diet	closely associated with water; riparian areas and wetland edges; dens often located under log jams and tree roots, old muskrat burrows, and rock piles	
River otter	primarily fish, but they also will feed extensively on aquatic insects and crayfish; small mammals and amphibians are eaten occasionally	largely obtained from their diet; clean water is essential for fish populations	riparian areas along creeks and rivers, as well as freshwater lakes, inland wetlands, coastal shorelines, marshes, and estuaries	Smaller than otter skull
Raccoon	crayfish, birds, eggs, small mammals, insects, lizards, snakes, worms, fish, carrion, grains, seeds, hard and soft mast, and foods prepared for human and pet consumption	require water frequently during warm seasons	riparian areas, bottomland hardwoods, and along other wetlands; natural tree cavities are used for denning and daytime loafing; raccoons also den in ground burrows under stumps, brush piles, junk piles, old abandoned buildings, and rocky cliffs and ledges	
Red fox	primarily small mammals, birds, insects, hard and soft mast, and occasionally carrion; red foxes will store food and are very good at relocating these caches	requirements largely unknown; they likely drink free-standing water and get some water from the foods they consume	prefer a mixture of herbaceous openings with brushy cover, shrubland, and woodland; dens are located in brushy areas and in hollow logs, under large brush piles, under large rocks, or in underground burrows often under roots of blown-over trees; daytime resting sites are generally thickets and brushy areas	

Coyote	rodents, rabbits, and other small mammals, insects, birds, eggs, deer, carrion, and soft mast; livestock and wild ungulates (deer, elk, pronghorn) usually are represented in coyote stomachs as carrion; however, in some cases, coyotes prey heavily on deer and pronghorn fawns, and can limit reproductive success in some situations	requirements are not well documented; necessary water probably is obtained in diet	grasslands, shrublands, regenerating forest, mature forest; crevices and burrows along river banks, rock ledges, brushpiles, and holes under stumps or abandoned buildings are used as den sites for raising pups	
Big brown bat	night-flying insects, especially beetles	free-standing water is required daily when they are active	buildings and hollow trees are often used for daytime roosts; bat houses also may be used for daytime roosting; caves, mines and buildings are used for hibernation	Contraction of the second seco
White-tailed deer	forbs, browse, acorns, beechnuts, soft mast (such as blackberry and persimmon), grains, grasses, and mushrooms; in the northern parts of the range, coniferous browse is important in winter	obtain most of their water from diet, but drink free-standing water when available	dense woody vegetation as well as relatively tall early successional vegetation, including native grasses, forbs, and shrubs; at the northern edge of their range white-tailed deer use wintering areas, which are usually dense stands of spruce, fir, cedar, and hemlock to avoid deep snow and cold winds	May also have antlers

Plains hog-nosed snake	mostly toads, but also other reptiles, birds, mice, and eggs	shrublands and grasslands	necessary water obtained from diet	m 1 2 3
Eastern snapping turtle	insects, crayfish, clams, earthworms, fish, frogs, toads, salamanders, snakes, small turtles, birds, and small mammals; also consumes various aquatic plant species	requires permanent bodies of water; obtains water from food	permanent water bodies with muddy bottoms and thick vegetation; hides underwater beneath submerged stumps, roots, brush, and buried in the mud	
Crawfish frog	adults eat beetles, spiders, crickets, ants, millipedes, and small crayfish; tadpoles filter feed on phytoplankton	breed in ephemeral, fishless ponds with grassy margins	adults require low, wet areas, including moist meadows, prairies, woodlands, and brushy fields; burrows are required; crayfish burrows are preferred, but any burrow may be used as long as it reaches the water table; tadpoles require ponds that contain some algae, pondweed, and other vegetation to provide food and shelter	

American bullfrog	insects, crayfish, other frogs, reptiles, snails, fish, and occasionally small mammals and birds	stable water levels are necessary for hibernation and egg development; water levels should be maintained at a constant level	dense, emergent aquatic and upland herbaceous vegetation adjacent to water for hiding and foraging	
Tiger salamander	adults eat worms, snails, insects, and slugs; larvae eat a wide variety of aquatic organisms, including invertebrates and other amphibian eggs and larvae	ephemeral or semi-permanent ponds are necessary for reproduction; ponds should be fishless if successful reproduction is to occur	adult tiger salamanders live underground in burrows for most of the year; deep leaf litter and large amounts of downed woody debris are most desirable	
Bluegill	a variety of zooplankton (microscopic animal life) during the first few months of life, progressing to insects and their larvae, eggs, earthworms, tadpoles, small minnows, and crayfish	basic requirements include dissolved oxygen (minimum of 4 parts per million); pH between 6.5 and 9.0; and water temperature should reach at least 70 F during summer (one foot below surface in the shade)	aquatic environments with submerged rocks, woody debris, and aquatic vegetation where small fish (prey) hide	

Largemouth bass	young bass eat insects and other invertebrates	aquatic	basic requirements include	
	and other invertebrates (worms, crayfish, and zooplankton); adults eat small fish, such as bluegill, and a variety of minnows, as well as tadpoles, crayfish, and even	environments with submerged rocks, woody debris, and aquatic vegetation where small fish (prey) hide	dissolved oxygen (minimum of 4 parts per million); pH should range between 6.5 and 9.0; water temperature should reach at least 70 F during summer (one foot below surface in shade)	
	ducklings			

- Part 1: Mammals
  - o Fur or hair
  - o Produce milk
  - Live young (generally)
  - What are specialized teeth?
- Rodents: rabbits, squirrels
  - Diet: will they eat meat?
    - Eastern Cottontail: forbs & grasses, browse, soft mast (spring), bark & shrubs of trees (winter), buds
    - Gray squirrel: hard & soft mast, seeds, grains, bark, buds, mushrooms, bird eggs
  - $\circ$   $\;$  Water: obtained through diet
  - o Cover: Protection from predator animals
    - Eastern cottontail: grasses, burrows
    - Gray squirrel: trees, cavities, leaf nests
- Semi-aquatic mammals
  - o Live in or near water
  - $\circ$   $\;$  Water generally obtained through diet
    - Depend on water for food source
  - o <u>Diet</u>
  - Beaver & muskrat: herbivores
    - American Beaver: bark from shrubs and trees, forbs and grasses
    - Common Muskrat: roots, tubers, green shoots of emergent aquatic plants
  - Mink & River otter: carnivores
    - Mink: rabbits, mice, muskrats, crayfish, snakes, birds
    - River otter: mostly fish, but also insects, crayfish, small mammals, and amphibians
  - o Cover: Generally riparian areas near water
  - Cover: Varied. Riparian areas, hardwoods, wetlands. Tree cavities and ground burrows used for denning.

- Dog-like mammals: red fox, coyote
  - Diet: small mammals, insects, birds, eggs, carrion, soft mast
    - Red fox: also eat hard mast, cache food
    - Coyote: May hunt larger prey like livestock and deer
  - Water: may be obtained from diet, may use freestanding water when available
  - Cover: Make dens, grasslands, shrublands, woodland.
    - Red fox: burrows
- Part 2: Reptiles
  - $\circ$  Scales
  - Cold-blooded (get heat from environment)
  - Usually lay eggs
- Part 3: Amphibians
  - $\circ$  Smooth, thin, scaleless skin
  - o Breath & absorb water through skin
  - Moisture needed
- Part 4: fish
  - $\circ \quad \text{Live in water} \quad$
  - $\circ$  Cold-blooded
  - o Most breathe with gills
  - o Most have scales