

Identification of Kansas Turtles

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In Kansas, there are known to be at the present time thirteen *species*, or different *kinds*, of turtles. Some of these are common and are often seen, whereas others are relatively rare or shy and are seldom seen. The thirteen species in Kansas may be placed in seven groups on the basis of their appearance. That is, if we place those turtles together which *look* alike, we form six pairs, with one kind left alone. This method has been adopted on the following pages in order to compare the differences in those turtles which cannot be told apart readily.

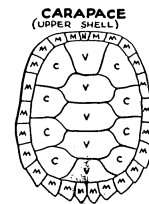
What to look for—For purposes of identification, there are certain characteristics which will separate each of the Kansas species from the others. Perhaps only one feature will have to be noted, such as the leathery shell of the soft-shells, or the long tail of the snappers, in order to identify the turtle as to one of the *pairs* on the following pages. However, it will be necessary to note more characteristics in order to separate one of a pair from the other. Read the description and comparison for each group and look for the differences in the illustrations.

The following are the characteristics to be noted:

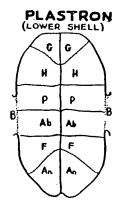
1. *Head markings*—Look for number, shape, size, and color of any lines on head and neck.
2. *Plastron and carapace markings*—See if there are any markings at all; and color, shape, number, and size of these markings.
3. *Shape of legs*—Are the legs stump-like (box turtles)?, or are the hind feet large and paddle-like (aquatic turtles)?
4. *Shape of carapace*—Is the shell high or low? dome-shaped or flattened? round, oblong, or rectangular? Is the rear smooth or roughly notched? Are the plates smooth and flat? or do they project upward in points?
5. *Where found*—Was the turtle found on land, in a lake, river, farm pond, ditch, or muddy slough? In what section of the state was it found? (Remember that sometimes turtles are carried away from where they naturally occur and are either set free or escape.)

Key to Kansas Turtles

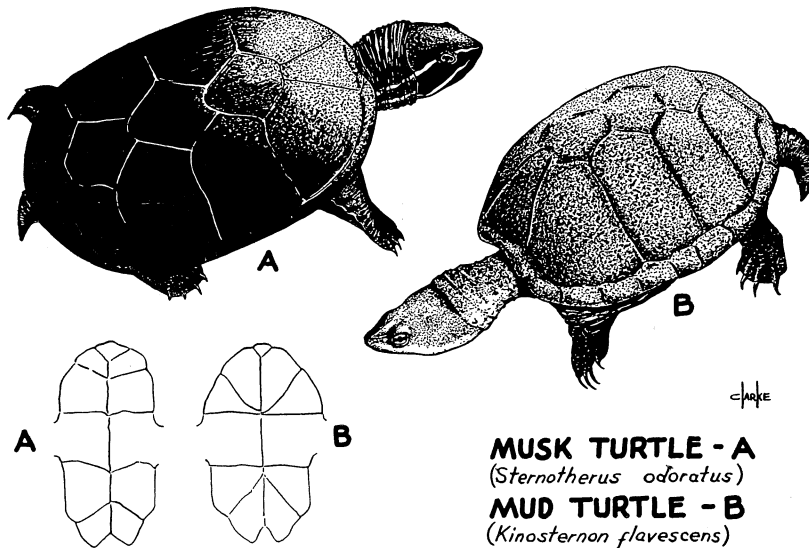
1. Large head; small plastron; long tail with raised scales; mean disposition snappers (page 3)
2. Smooth, dark oval shell; small size; aquatic; 2 barbels on chin; 11 plates on plastron (a single gular) musk and mud (page 1)
3. On land; carapace high; legs stump-like; plastron can be closed against carapace box (page 2)
4. Aquatic; carapace low, with notched rear edge, may have red blob on each side of head behind eye, large rear feet, **nuchal plate of carapace at least twice as long as broad** sliders (page 2)
5. Aquatic; carapace may have raised points on midline or smooth, with rear edge roughly notched; large rear feet; **nuchal plate of carapace less than twice as long as broad** map (page 2)
6. Aquatic, carapace low and smooth; red and black design on plastron and under edge of carapace painted (page 3)
7. Aquatic; large rear feet; carapace "pancake" shape and color, leathery in texture—not hard soft-shells (page 3)



N - Nuchal
M - Marginal
V - Vertebral
C - Costal



G - Gular
H - Humeral
P - Pectoral
Ab - Abdominal
F - Femoral
An - Anal



MUSK TURTLE - A
(*Sternotherus odoratus*)
MUD TURTLE - B
(*Kinosternon flavescens*)

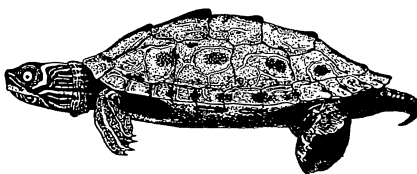
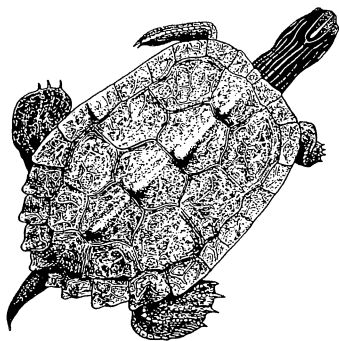
Musk

1. Two pairs of whitish lines on the head. These lines begin close together on each side of the head at the nose and progress backward along the head and neck, one passing above the eye; the other below it.
2. Shape of second pair of plates of plastron not triangular.

Mud

1. No paired whitish lines on sides of head. Chin, throat and neck yellowish.
2. Shape of second pair of plates of plastron triangular.

MAP TURTLES



Map

1. In large adults, the keel on the carapace is much reduced.

2. The yellow spot behind the eye small, rounded, and separated from the eye by a small vertical line or lines.

False Map

1. In large adults, the keel on carapace prominent.

2. The yellow-spot behind the eye long vertically, comma-shaped, and is not separated from the eye by a small vertical line or lines.

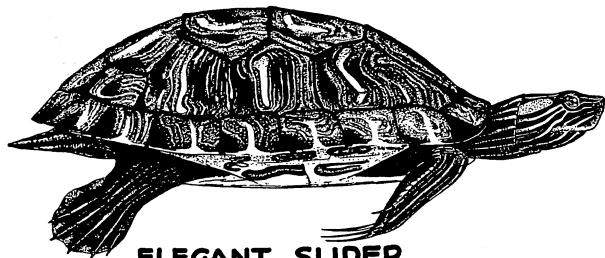


MAP TURTLE
(*Graptemys geographica*)

FALSE MAP TURTLE
(*Graptemys pseudogeographica*)

CLARKE

SLIDERS

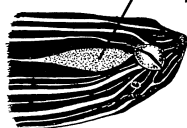


ELEGANT SLIDER

Note Red Spot



Plastron of
Young Elegant Slider



ELEGANT

(*Pseudemys scripta elegans*)



SAW-TOOTHED

(*Pseudemys floridana hoyi*)

CLARKE

Elegant

1. A large red spot on the head behind the eye. This spot is longer than it is wide.

2. Ridge on the crushing surface of the upper jaw not toothlike.

3. Pattern on carapace mostly straight vertical yellow lines.

4. Plastron with dark mark on each plate or entirely dark.

Saw-toothed

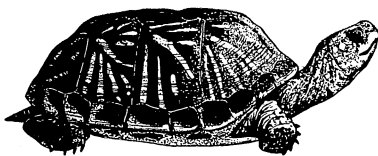
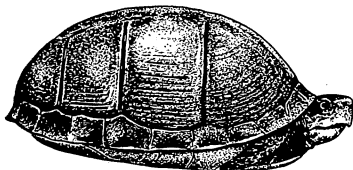
1. No red spots on the head. Yellow lines narrow on top of head and broader on underside.

2. Ridge on the crushing surface of the upper jaw is toothlike.

3. Pattern on carapace mostly made up of concentrically arranged yellow lines, the vertical the most distinct.

4. Plastron creamy white and without dark markings or with seven dark markings only faintly showing.

BOX TURTLES



Three-toed

1. Upper shell more rounded, or "dome-shaped."

2. Plastron plain greenish-tan or yellowish.

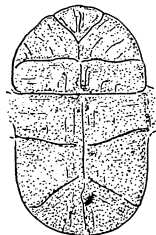
3. Usually 3 toes on each hind leg.

Ornate

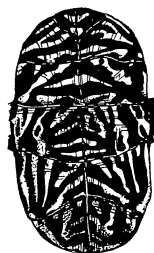
1. Upper shell more flat on top.

2. Plastron marked with yellow and brown streaks.

3. Usually 4 toes on each hind leg.



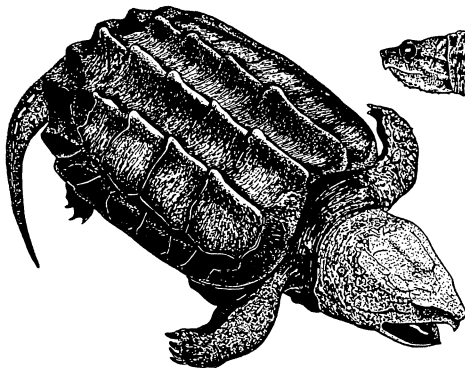
THREE-TOED
(*Terrapene carolina triunguis*)



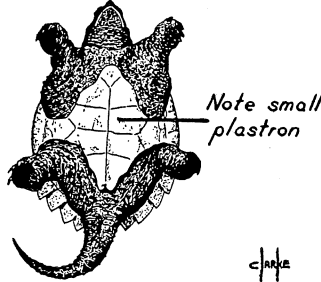
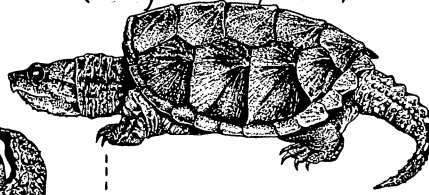
ORNATE
(*Terrapene ornata*)

CLARKE

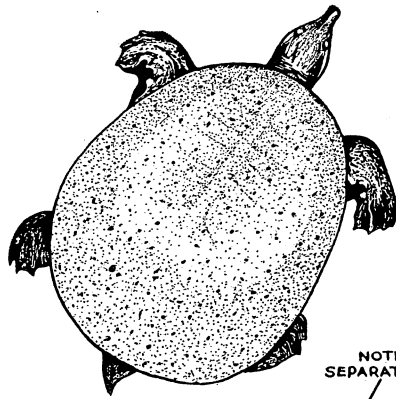
COMMON SNAPPER
(*Chelydra serpentina*)



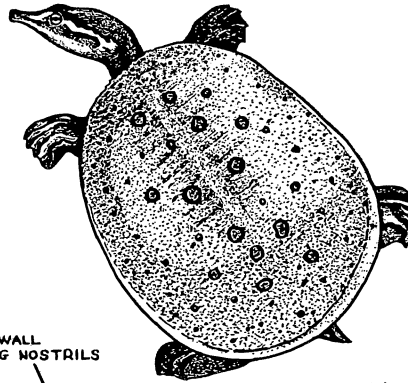
ALLIGATOR SNAPPER
(*Macrochelys temmincki*)



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| <p>Alligator</p> <ol style="list-style-type: none"> 1. The three rows of prominent points on the upper shell remain so during the life of the turtle. 2. Maximum size is much larger; the carapace about 24 inches and a weight of about 200 pounds. 3. Hard plates on top of the head. 4. An extra row of plates (supra-marginals) between coastals and marginals in center of each side of carapace. 5. Numerous small scales on lower side of tail. | <p>Common</p> <ol style="list-style-type: none"> 1. Upper shell becomes rather smooth as the turtle becomes larger. 2. Maximum size is smaller; the carapace about 15 inches, and weight of about 70 pounds. 3. Soft skin on top of the head. 4. The usual 3 rows of plates on carapace (vertebrals, coastals, and marginals.) 5. Two rows of large plates on lower side of tail. |
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SMOOTH SOFT-SHELL
(*Trionyx muticus*)

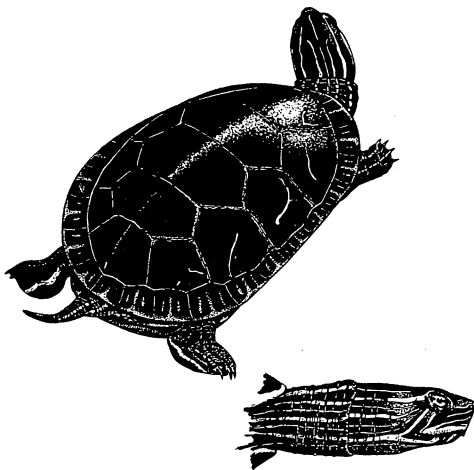


SPINY SOFT-SHELL
(*Trionyx ferox hartwegi*)

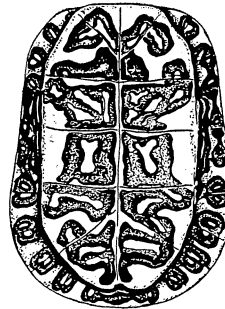
NOTE WALL SEPARATING NOSTRILS



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| <p>Smooth</p> <ol style="list-style-type: none"> 1. No lateral projection on either side of the wall separating the nostrils. (see illustration) 2. No bumps or tubercles on the front edge of the carapace. 3. Dark markings on carapace in the form of small scattered spots. 4. Usually no dark line around carapace near the edge. | <p>Spiny</p> <ol style="list-style-type: none"> 1. A lateral projection on each side of the wall separating the nostrils. This may be seen by looking into the nostrils. (see illustration) 2. A group of bumps or tubercles on the front edge of the carapace. 3. Dark markings on carapace in the form of small circles which form a pattern—larger in center of carapace and smaller toward the edges. 4. Usually a dark line around carapace near the edge. |
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PAINTED TURTLE
(*Chrysemys picta belli*)



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Pattern on plastron is red and black

REFERENCES

Carr, Archie. 1952. Handbook of Turtles. Cornell University Press, Ithaca, N.Y.

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Smith, Hobart. 1956. Handbook of Amphibians and Reptiles of Kansas. Museum of Natural History, University of Kansas, Lawrence.

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