

# SEXING EASTERN BOX TURTLES

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Sex determination in turtles can be tricky because unless you see male genitalia or see a female laying eggs you can't be 100% sure about a box turtle's sex. Instead, a combination of features should be used to confidently assign a sex to a turtle. We suggest using a 3 out of 7 determination rule. This means that a turtle should have at least 3 of the following 7 key characteristics before any sex determination is made: coloring on the face and forelegs, eye color, hind claws, general shape of the carapace, depression or lack thereof on the plastron, tail length and placement of the anus, and extent of flaring of marginal scutes.

**CAUTION:** Due to variability in sex characteristics in box turtles, these traits are not always reliable for sex determination. For research purposes, if ever unsure about the sex of a turtle, do not hesitate to mark it as "Unknown" for sex on the data sheet.

## 1. Coloring on the face and forelegs

Body coloring can differ greatly between the two genders. Females typically have a dull yellow or brown coloring on their heads and forelegs, contrasting greatly with the bright orange and yellow accenting of the heads and forelegs of males.



## 2. Eye color

Similar to their body coloring, males usually have bright red eyes, whereas females are normally seen with a brownish eye coloring.



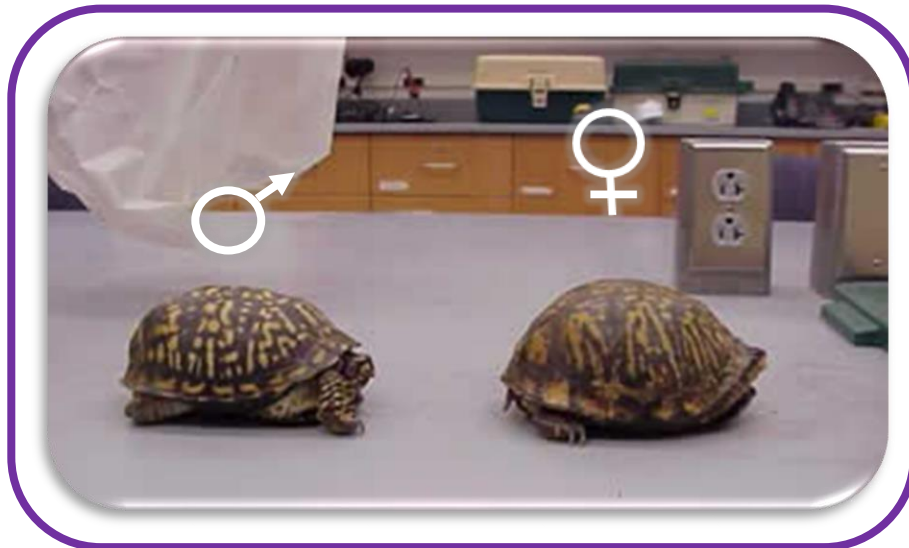
### 3. Hind Claws

The hind claws are located on the back feet of the turtle. Male hind claws are thicker and more curved than those on females.



### 4. Shape of Carapace

The term carapace refers to the upper, or top, of a turtle's shell. Males usually have a flatter carapace, giving them an overall thinner appearance (dorsal-ventrally). The carapace on females are more highly domed than males.



### 5. Depression on Plastron

The plastron is the bottom of a turtle's shell. As a characteristic of box turtles they possess a hinge on their plastron allowing for them to completely close up their shells. Males have an indentation on the posterior end of their plastron (below the hinge). This depression allows the

male to gain stability when mounted on a female during copulation. Females, which do not mount, lack this depression on their plastron.



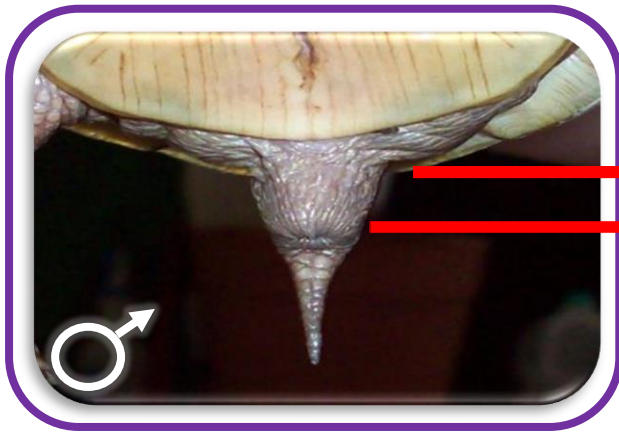
### 6. Flaring of Marginal Scutes

Marginal scutes are the scutes located on the outer perimeter of the carapace. In males, these scutes flare out more than those on females.



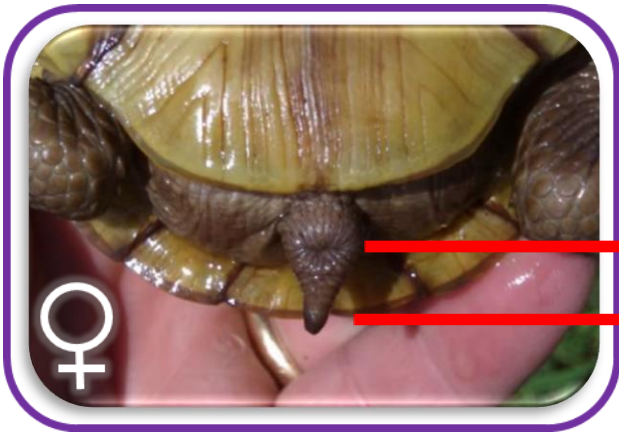
### 7. Tail length and Placement of Vent

The tail length and placement of the vent in respect to the posterior edge of the carapace can provide clues as to whether you are looking at a male or female. In males, the tails are usually longer and the vent is located below the edge of the carapace. In contrast, female box turtles commonly have shorter tails with their vent residing above the edge of the carapace.



→ Under-edge of carapace

→ Vent



→ Vent

→ Under-edge of carapace