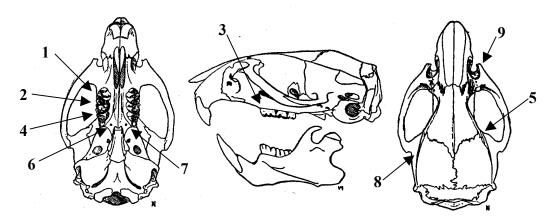
# **Key to Rodent Skulls**

### **MEDIUM-SIZED RATS**

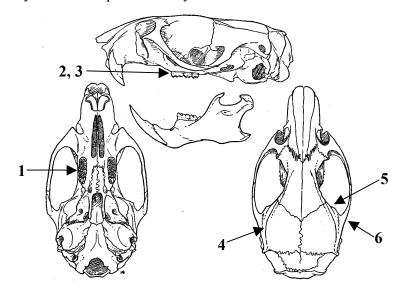
### Cotton Rat (Sigmodon hispidus)

- 1. All teeth large compared to other rodents of similar size.
- 2. Tooth bed is oval shaped, not teardrop shaped.
- 3. Front molars emerge straight from tooth bed, not at an angle.
- 4. Molar groove shaped like:  $\Sigma$
- 5. Upper rim of eye socket is rounded, does not have a pointed edge.
- 6. 2 holes between the rear molars on the inside roof of the mouth (palate).
- 7. Palate ends at end of molars.
- 8. Prominent ridges extending from eye sockets towards rear of skull.
- 9. Bottom-front of eye socket has an extension.



### Marsh Rice Rat (Orysomys palustris)

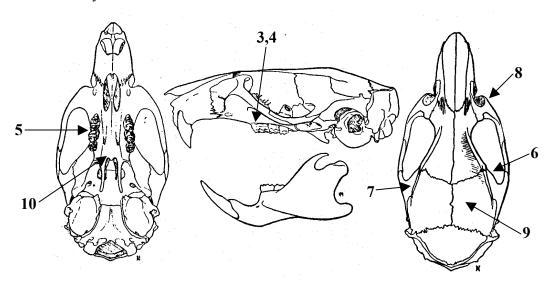
- 1. Teeth small compared to other rodents of similar size.
- 2. Front molars emerge straight from tooth bed, not at an angle.
- 3. Large rice rat may be confused with small Rattus, key is to look at front molars
- 4. Ridges extending from eye sockets towards rear of skull not well developed.
- 5. Upper rim of eye socket is rounded, does not have a pointed edge.
- 6. Rear of outer eye socket slopes smoothly into skull.



### **LARGE-SIZED RATS**

#### Roof Rat (Rattus rattus)

- Skull longer and pointer than cotton rat or rice rat.
- Skull generally longer than 25 mm.
- 3. Front molars (and their tooth beds) strongly angled up towards front of skull.
- 4. Front molars large.
- 5. Tooth bed teardrop shaped, pointed towards rear.
- 6. Upper rim of eye sockets have a slight point into the sockets.
- 7. Strong ridge on top of skull from eye socket to back of skull, swoops back and down when viewed from the side.
- 8. Bottom-front of eye socket has no extension.
- 9. Distance of the two plates between cranial ridges is wider (side to side) than longer (front to back)
- 10. Palate extends beyond rear molars.



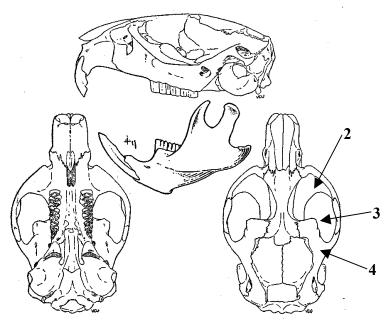
### Norway Rat (Rattus norvegicus)

- Skull longer and pointer than cotton rat or rice rat.
- Skull generally longer than 25 mm.
- Distance of the two plates between cranial ridges is longer (front to back) than wider (side to side).
- Strong ridge on top of skull from eye socket to back of skull, forms a straight line backwards when viewed from the side.

### **OTHER MEDIUM AND BIG THINGS**

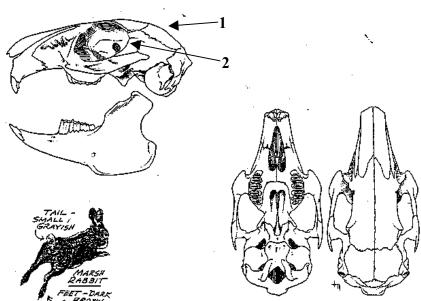
#### Round-tailed Muskrat (Neofiber alleni)

- Noticeably wider skull than the others.
- 2. Large, wide, flat eye sockets.
- 3. Upper rim of eye socket has a very prominent protrusion (nearly a right angle) into the socket.
- 4. No cranial ridges.



### Marsh Rabbit (Sylvilagus palustris) & Eastern Cottontail Rabbit (S. floridanus)

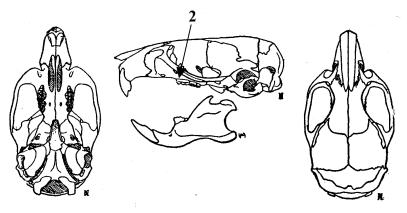
- 1. Entire skull very domed.
- 2. Eye sockets rounded and inset into skull.
- No way to distinguish between these two species by skull, but *S. palustris* more common in EAA.



## THE LITTLE GUYS

### **House Mouse (Mus musculus)**

- Smaller than most other rodent skulls, generally less than 25 mm.
- 2. Same angled front teeth as Rattus.



### Southern short-tailed shrew (Blarina carolinensis)

- 1. Pointy teeth.
- 2. Dark pigmented enamel on teeth.
- 3. No outer ridge around eye sockets.
- 4. Triangular shaped skull pointed towards the front.

