Prairie Dog Behaviors: Pre/Post Test

True or False

1. ________ Prairie dogs are known to have the most sophisticated natural animal language so far decoded.

2. ________ Prairie dogs auditory signals are seldom, if ever, accompanied by visual signals.

3. ________ Teeth chattering is observed when prairie dogs are grooming each other.

4. ________ Teeth chattering is observed when prairie dogs are sleeping.

5. ________ Prairie dogs kiss.

6. ________ Prairie dogs use their teeth as combs.

7. ________ Prairie dogs are active at night.

8. ________ Prairie dogs eat plants and occasionally very small animals (insects).

9. ________ At sunset, prairie dogs enter their burrows as couples.

10. ________ Prairie dogs do not waste any part of the plants they eat.

11. ________ All reptiles incite an alarm call.

12. ________ Humans seldom cause an alarm to be given.
Prairie Dog Behaviors: Pre/Post Test Key

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**Prairie Dog Behaviors**

Notes

Prairie dog behaviors can be broken down into four main categories: communication, intraspecific contacts, daily routine and feeding behavior and reactions to associated animals.

**Communication**

According to an article in National Geographic Magazine (April 1998), prairie dogs have developed the “most sophisticated natural animal language so far decoded.” Prairie dogs distinguish between different kinds of predators and humans, by using specific calls for each kind of animal. These auditory signals are often associated with visual signals.

Communications consist of alarm bark, tail flicking, reaction to alarm bark, all-clear call, teeth chattering and scream. An alarm bark is given whenever there is something dangerous or irritating in their vicinity. The prairie dog runs to its mound and gives the alarm call. It is accompanied by a vertical flick of the tail. The other prairie dogs react to the alarm by sitting up and looking around. If they feel threatened they will also run to their mounds and join in the alarm bark. The all-clear call is a different bark, accompanied by throwing the forefeet high in the air and bringing them down to the ground in a violent bowing motion that sometimes causes the animal to fall over backwards or to leap into the air. The teeth chattering has been observed when prairie dogs are grooming each other and when they sleep. The scream is given in reaction to fear; for example, a prairie dog may scream if being chased by a badger.

This is only a partial list of the communication calls used by prairie dogs – those that can be easily observed by students.

**Intraspecific Contacts**

Intraspecific contacts are mouth contact (kissing), anal gland sniffing, grooming and proximity (closeness) to each other.

Prairie dogs kiss by touching their front teeth (incisors) to one another. A kiss may be followed by grooming each other, by grazing together or by each going its own way. A prairie dog making an advance for a kiss that is not acknowledged by another prairie dog will frequently snarl and raise its tail in a spread out fashion. If a kiss still does not occur, then the chase is on.

Sometimes both prairie dogs assume a crouching position and take turns presenting their anal glands to each other for sniffing. This is similar to the behavior of other animals such as dogs. Its purpose may be for sexual identification, coterie identification, readiness for breeding and/or other reasons.
Prairie dogs take turns grooming each other. They use their teeth like a comb, raking them through the fur. Grooming has several purposes: removing parasites, removing molted fur and tactile stimulation. There is no apparent hierarchy or pattern by age or sex related to grooming behavior.

Prairie dogs enjoy each other’s company. They lay and sun themselves together, cluster together on the mounds and sleep together in their burrows at night. This is probably an extension of their colonial behavior. This also provides a sense of security.

**Daily Routine and Feeding Behavior**
Prairie dogs eat plants (herbivores), and occasionally insects such as grasshoppers. They are active during the day (diurnal). In warm weather prairie dogs come out of their burrows early in the morning. In colder weather they come out later (mid-morning).

When they first come above ground they sit on their mounds greeting (kissing) each other and looking around for about 10 to 20 minutes. They then graze for about an hour and return to their mounds to sun and stretch out. During the day they will play and feed at will, roaming some distance from their burrows. As sunset approaches they will graze closer to home. At the end of the day they enter their burrows one at a time. After about 15 to 30 minutes the colony is below ground for the night.

When feeding, the prairie dog cuts vegetation at its base, stands up holding the cut grass in one paw and eats the lower tender part of the plant. Only a few bites may be taken, and the rest is discarded.

**Reactions to Associated Animals**
In general, animals that are not considered to be predators are tolerated or ignored by prairie dogs. Insects, small birds, rabbits, other rodents (mice and ground squirrels) and some reptiles do not incite an alarm bark. Through time and experience prairie dogs have learned to distinguish the harmless from the harmful. As mentioned earlier, prairie dogs have developed a language that discriminates between different kinds of predators. Hawks, badgers and most humans will cause an alarm to be given!

**Assignments**

Use *Prairie Dog Behaviors Checklist* to compare and contrast captive and wild prairie dog behaviors.

Read the *National Geographic* article: *The Vanishing Prairie Dog*, April 1998, pages 117 - 130.

Use the checklist to write a report about your observations (when, where, conditions, what you saw or did not see, compare and contrast different sites, etc.).
Prairie Dog Behaviors: Lecture Outline
Work Sheet

1. What are the four main categories of prairie dogs behaviors?
   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________

2. What does the *National Geographic* article say about prairie dog communication?

3. What are some of the vocal (auditory) and visual signals given by prairie dogs?

4. List the four intraspecific prairie dog contacts.
   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________
   _____________________________________________________________

5. What does intraspecific mean?

6. When are prairie dogs active and what do they like to eat?

7. Summarize the daily routine of a prairie dog colony.

8. Summarize the prairie dog reactions to associated animals.
**Prairie Dog Behaviors: Checklist**

<table>
<thead>
<tr>
<th>Location __________________________</th>
<th>Date ____________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observer(s) _______________________</td>
<td>Natural or Captive (circle)</td>
</tr>
<tr>
<td>Time ____________</td>
<td>Weather (temp, wind, etc.) __________________________</td>
</tr>
<tr>
<td>Other information __________________</td>
<td>____________________</td>
</tr>
</tbody>
</table>

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**Communication**

Instructions: Check appropriate columns for each behavior.

<table>
<thead>
<tr>
<th>Communication Behavior</th>
<th>Observed</th>
<th>Not Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm Bark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tail Flicking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction to Alarm Bark</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All-Clear Call</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teeth Chattering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scream</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Intraspecific Contacts**

| Mouth contact (kiss) |          |              |
| Anal gland sniffing  |          |              |
| Grooming             |          |              |
| Proximity (closeness)|          |              |

**Sunning, stretching, feeding or playing.** (Describe activity, numbers, ages, etc.)
### Reaction to Associated Animals

Directions: Describe behavior and list specific kind of animal involved.

<table>
<thead>
<tr>
<th>Species</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humans</td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td></td>
</tr>
<tr>
<td>Reptiles</td>
<td></td>
</tr>
<tr>
<td>Insects</td>
<td></td>
</tr>
<tr>
<td>Small Mammals</td>
<td></td>
</tr>
<tr>
<td>Livestock</td>
<td></td>
</tr>
<tr>
<td>Large Mammals (herbivores)</td>
<td></td>
</tr>
<tr>
<td>Predators</td>
<td></td>
</tr>
</tbody>
</table>

### Daily Routine and Feeding

- **Time Above Ground**
  - AM ____________
  - PM ____________

- **Time Span Feeding**
  - AM ____________
  - PM ____________

List kinds of plants and insects used for food by prairie dogs.