My Name: ____________________________

My Role Play Name: ____________________________

My Interest for the Family Management Plan is (circle one):

Timber  Water & Soil  Recreation  Wildlife

My Color: ___________________ My Number: ________

My Animal: ____________________________
YOUR FIELD DAY!

GROUND RULES:

This is a school day and school rules apply!

Be RESPONSIBLE

• Have your materials (bring extra pencils)
• You are responsible for doing your work
• Dress for the weather

Be RESPECTFUL

• Be respectful of the volunteers by listening and actively participating
• Be respectful of the property (please pick up trash you find)
• Be respectful of the plants and animals (don't pick them, or pick them up — this is their home)
• Be respectful of one another (allow others the opportunity to learn, and keep your hands to yourself)

Be SAFE

• Wear appropriate shoes
• No running
• Keep your hands to yourself
• Do not pick plants, some are poisonous
• Students who have allergies need to come prepared (asthma, bee stings, etc.)
Wildlife

Volunteer Name: __________________________

Profession: ___________________________ Employer: ___________________________

1. What does 'Two Up, Two Down' mean in terms of the Forest Practices Act rules to enhance wildlife?

2. Name two ways wildlife biologists “look” for wildlife.

   1. 
   2. 

3. On the trail, name evidence of wildlife that you find:

<table>
<thead>
<tr>
<th>Evidence</th>
<th>Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

4. What is one thing you can learn about an animal from analyzing it’s scat?

5. After you touch the fur, list your favorite fur and share one observation you made about it.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. After you dissect owl pellets, answer these questions:

   Circle one: An owl is a(n)...
   carnivore   omnivore   herbivore

7. What is the coolest thing you found in your pellet?
Soils

Volunteer Name: __________________________

Profession: ___________________________ Employer: ___________________________

Soils Type, Structure & Productivity

1. Fill in the chart

<table>
<thead>
<tr>
<th>What are the 3 mineral components of soil from smallest to largest:</th>
<th>How does it feel?</th>
</tr>
</thead>
<tbody>
<tr>
<td>smallest:</td>
<td></td>
</tr>
<tr>
<td>mid-size:</td>
<td></td>
</tr>
<tr>
<td>largest:</td>
<td></td>
</tr>
</tbody>
</table>

2. Does the soil at this site have more sand, silt or clay?

CIRCLE ONE: Sand  Silt  Clay

3. What are three non-mineral components of soil?

1.  2.  3.

Soils Erosion and Compaction

1. FILL IN THE BLANK: Vegetative cover _________________________ soil. Leaving _________________________ helps to minimize silt moving into the water.

2. Which soil absorbs water faster? CIRCLE ONE: compacted  uncompacted

Why?

3. Name two causes of compaction.

1.  2.

4. Discussion: When might compacted soil be helpful?
Volunteer Name: ________________________________

Profession: ____________________________ Employer: ____________________________

**Observing a Stream**

FILL IN THE BLANKS on your stream walk:

1. A riparian area is a zone along streams, or around ponds or lakes, which provides unique _________________________ for plants and animals.

2. Maintaining vegetation near a stream helps cool the water by providing _______________________.
   Vegetation also provides _________________________ and _________________________ for aquatic animals.

3. The Forest Practices Act requires buffers to be left along streams because the vegetation acts as a _________________________ for soil to protect water quality.

4. Identify three things in this stream that make it good habitat for fish
   1. _________________________ 2. _________________________ 3. _________________________

**Making a Stream**

Use the stream simulator to investigate each condition suggested below.

<table>
<thead>
<tr>
<th>Condition</th>
<th>How might this affect water quality?</th>
<th>How might this affect fish habitat?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make the stream channel as straight as possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place &quot;large logs&quot; or &quot;boulders&quot; in the stream to change the flow.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish a riparian buffer of trees and other plants.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 • Forest Field Days
Recreation

Volunteer Name: __________________________

Profession: ____________________________ Employer: ____________________________

Trespassing & Vandalism (A)

1. Name two types of vandalism you see.
   
   1. ____________________________ 2. ____________________________

2. Name one way trespassing and vandalism could affect wildlife?

3. What ideas might a landowner consider to minimize littering and garbage dumping?

4. Name one other thing you can do as a landowner to prevent vandalism?

Hiking Safety (B)

1. What are two pieces of information that you should tell someone before you go hiking?

   ____________________________ you are going and ____________________________ you will return.

2. Search and Rescue experts will tell you to “hug a tree” if you should find yourself lost in the woods. What do they mean?

3. Here are the “10 essentials” to always bring when heading out into the forest? Circle the three that rescue professionals consider the most important?

   1. Map & compass
   2. Water
   3. Sunscreen
   4. First aid kit
   5. Whistle
   6. Garbage bag/ rain gear
   7. Trail food
   8. Pocket knife
   9. Flashlight
   10. Matches/fire starter
Hiking Trails (C)

1. If a hiking trail gets a lot of use, name one way that you could you make it last?

2. How much does it cost to put in a trail?

3. Name one important thing for hikers to remember to protect the forest.

4. How might different users, such as horse or mountain bikes, affect trails?

Public Use (D)

1. For each public use, list what you need to provide and guess how much it costs to build each.

<table>
<thead>
<tr>
<th>Type of public use</th>
<th>What do you need to provide?</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>picnic sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>primitive camping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>full-service camping</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. What do you think makes for a good camp site? Is this one? Name two problems with this site:
   1. 
   2. 

3. Would you collect fees from the public? If so, how?

4. Name two rules you would enforce at your campground and explain why.

<table>
<thead>
<tr>
<th>Rule</th>
<th>Why</th>
</tr>
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<tr>
<td></td>
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**Forest Appreciation (E)**

1. Diversity of plants is important for the forest to function well and support many different kinds of wildlife. Learn to identify two NATIVE species and name them here:
   1. 
   2. 

2. What interpretive and educational opportunities could be offered in your forest? Name two.
   1. 
   2. 

3. An invasive species is a non-native species that reduces diversity by taking over and not allowing other plants to establish. Learn to identify an invasive species, and name it here:

4. What can you do to prevent invasive species from damaging your forest? Name two things:
   1. 
   2. 
Collecting Data

It is not practical to measure every tree in a forest, so foresters take samples and make estimates.

The sample plot is a 1/10th of an acre (radius=37.2 ft.). To calculate the volume of the tree we need to count the number of trees and measure their heights and diameters.

1. How many trees per acre? Make a guess! ________

   ______ number of trees in 1/10th acre plot

   ×10 plots per acre

   = ______ number of trees per acre

2. What is the average DBH (measured at 4.5 ft. above the ground)? Make a guess! ________

   1._______ 2._______ 3._______ 4._______ 5._______ 6._______ 7._______

   8._______ 9._______ 10._______ 11._______ 12._______ 13._______ 14._______

   15._______ 16._______ 17._______ 18._______ 19._______ 20._______ 21._______

This activity is continued on the next page.
3. What is the average tree height? - Make a guess! ________ Actual height: ________  
   *Practice with a clinometer!*

4. What is the average bf per tree? ________  
   *Use the Timber Volume Table!*

5. What is the tree **volume** (bf) in the plot?  
6. What is the value of the trees on the plot and acre? 

   - _______ number of trees in plot  
   - _______ average bf per tree  
   - _______ bf per plot  
   - $0.60 per bf (= $600 per thousand bf)  
   - _______ bf per plot  
   - $_______ per plot  
   - 10 plots per acre  
   - $_______ per acre

7. How can you tell the age of the trees? - Make a guess! ________  
   *Practice with reading a core sample!*

   Count the years it took to grow an inch ________ Actual Age: ________ years

**Thinking about Management**

1. If you were going to thin this forest (taking out 1/4 of the trees), how would you select what trees to harvest?

2. Can you find an example of a tree that is **suppressed** with other trees **outcompeting** it for resources?