

Environmental & Natural Resources

Site Analysis Example

Environmental Analysis Scorecard

Your assignment is to analyze the given ecosystem with the following five aspects in mind:

Question	Possible Points	Score
<p>1. Identify and list as many organisms (both native & invader) that can be found within the marked borders of this site.</p> <p><i>Grasses= smooth brome, reed canarygrass, Kentucky bluegrass, meadow foxtail</i></p> <p><i>Forbs = Poison hemlock, Canada thistle, field horsetail, alfalfa, prickly lettuce, mullen, field pennycress</i></p> <p><i>Shrubs/trees = willow, rose, cottonwood, birch, redosier dogwood,</i></p>	20	
<p>2. Identify and list all non-living components found in the marked site.</p> <p><i>Soil, air, water, sunlight, sand, few rocks. Dead wood on stream edge.</i></p>	20	
<p>3. Describe the food web presented in the marked ecosystem.</p> <p><i>Grasses/forbs → Cottontail Rabbit → tertiary consumers → decomposers. See food web diagram on next page</i></p>	20	
<p>4. Identify the state of succession of various grasses, shrubs, & trees.</p> <p><i>Site in mid- to late- successional stage</i></p> <ul style="list-style-type: none"> • <i>Key native shrubs and trees are on site but in early stages of development.</i> • <i>The stream experienced down cutting in spring indicating instability. As shrubs and trees on streambank develop the stream should become more stable.</i> • <i>There is good diversity of growth forms on the site so it is likely to develop to late a successional stage.</i> 	20	
<p>5. Determine whether a healthy balance exists and recommend remediation where needed.</p> <ul style="list-style-type: none"> • <i>The stream is currently not stable as it is experiencing down cutting. More mature woody plants or woody debris is needed to increase stability</i> • <i>Major weeds = Poison Hemlock and Canarygrass</i> • <i>Should try to weed control poison hemlock with biocontrol or chemical and plant forb or grass after controlled.</i> 	20	
Total Score of 50 points possible =		

Question 3 Food web diagram:

For 2017 event, a white-tailed rabbit was indicated as the primary consumer in the marked site. The main diet of white-tailed rabbits is forbs and young grasses. For scoring, we accepted nearly any food web example if students attempted to think through the possible directions.

