



SHORELINE RESTORATION INDOOR LAB

BACKGROUND

Things you should know. Define the following:

- Littoral zone:
- Limnetic zone:
- Woody plants:
- Forbs/flowers:
- Grass/sedges:

Factors that affect rain/water “run-off” into lakes (erosion):

- Slope - How steep is the land surrounding the shore
- Type of soil - Sandy soil drains well, but doesn't hold well
- Vegetation - Plants hold back water flow
- Prevailing wind - Winds “buff” shorelines causing erosion. Our prevailing winds come from the West.
- Light - Essential for plants to grow, but too much causes drying.
- Human activity - Paths/roads directly to the lake enhance erosion.

MAP WORK: Study the map of Bony Lake on the next page, near Barnes, WI.

- Where is the deepest part of the lake? Put a **BLACK “D”** on the area. (5 pts.)_____
- How deep is it? (5 pts.)_____
- Close contour lines mean “drop-offs.” Put a **BLACK “DO”** on the three areas with extreme drop offs. These drop-off areas usually extend into shoreline and land areas, so they will also be steep. (5 pts.)_____
- With the **BLUE** marker color the lake and a little of the shoreline where it might be wet. (5 pts.)_____
- With the **YELLOW** marker, color the land area around the lake and a little into the lake. Green should appear where the blue and yellow overlap. This **GREEN** area is the **LITTORAL** zone where most of the plants should be to enhance the shoreline and lake that we should aggressively protect. (5 pts.)_____
- With the **RED** marker, color the areas most prone to erosion. Consider slope, wind and human activity. (5 pts.)_____
- Now design your ideal house/cabin site. With the **BLACK** marker, make a **SQUARE** for a house/cabin and a **LINE** for a road to the cabin and trail to the lake. (10 pts.)_____

TOTAL SHORELINE RESTORATION POINTS (35 pts.)_____



Bony Lake, Bayfield County, Wisconsin.