

2008 Maine Envirothon Theme
"Recreational Impacts on Natural Resources"

Date: January 1, 2008
To: 2008 Envirothon Advisors and Teams
From: tish carr, Education Coordinator & Jim Chandler, CI Guru
Re: Current Issue Testing Station

Testing at the Current Issue Station – *Recreational Impacts on Natural Resources* - is different than at the other stations. This station involves a written exam and an oral presentation. Teams will present their poster to two or three judges, an additional judge will oversee the written testing.

All teams should investigate, research and prepare a poster and a **5-minute oral presentation** addressing the current issue project for *Regionals*. Teams should practice presenting in the allotted time. **Please note that team members are allowed to refer to note cards when presenting.** Posters should be used during the presentation. If time allows, judges may pose a few questions. Judges will use the enclosed scoring rubric to score each team's presentation. (NOTE: A **7-minute oral presentation** and 2-minute Q&A format will be used for the **State Final**.)

Rules regarding the poster presentations:

- Each team is allowed to create 2 posters. Posters can be attached but can be no larger than a total of 1,232 square inches. This is equal to two poster boards 22 x 28 inches each.
- Teams may redesign their posters into other shapes (ovals, etc.) or even three dimensional designs, however, the total area cannot exceed 1,232 square inches. All fonts \geq 18 pt.
- Teams cannot make posters with removable parts for use at the competitions. The poster(s) must remain intact.
- There should be no writing, other than the Team/School name, on the back of the posters.
- Any medium may be used to create the poster(s).
- Teams should bring their posters to the registration desk when they arrive at the competition.
- Overlays are permissible but can not exceed the poster size of 22 x 28 inches or 1232 square inches. Multiple overlays are permissible but total overlays can not exceed poster size.

Rules regarding the written test:

- Teams cannot use note cards during the written portion of the test.

Testing and Judging Process

The total time period at the Current Issue Station is 30 minutes. This is a very tight time schedule! Teams rotate through the testing and presenting sequence. As one team is making its oral presentation (5 minutes), another is taking the written exam (20-25 minutes). Any team may be interrupted during the written portion and asked to present their poster. If so, a judge will keep track of the remaining time and allow the team to return to the written exam once finished with the presentation portion.

Scoring

The poster presentation is worth 60 points at Regionals and 100 points at State Final.

The written test is worth 40 points at Regionals. There will be no written test at Finals. The three teams closest to the Finals will begin CI presentations 30 minutes early to accommodate the longer presentation format that is more similar to the National Envirothon competition format.

If you have questions **please email them to** tish.carr@maineswcds.org.

Good Luck and Have Fun!

MAINE ENVIROTHON 2008 CURRENT ISSUE

“Recreational Impacts on Natural Resources”

RATIONALE:

Recreation, whether active or passive, is vitally important to everyone and offers physical, emotional, and spiritual benefits. The amount of time and money people spend on recreation is rising, along with the diversity of recreational opportunities.

For our purposes, we will narrow the focus to outdoor activities within a natural setting. Examples for Maine include (but not excluded to) hunting, fishing, hiking and backpacking, skiing(cross country and downhill), snowshoeing, cycling & mountain biking, rock climbing, rafting, canoeing and kayaking, bird watching, horseback riding and cultural observations/explorations. These may be low- or high-tech, low- or high impact, and require little or strenuous physical exertion. No matter the form of recreation, humans are consumers and leave behind some trace upon the earth. This ‘trace’ often grows considerably as the number of people using that resource increases and can negatively impact vital natural resources.

“Maine residents’ participation in and spending on outdoor recreation tops that of visitors in hunting, fishing, snowmobiling, all terrain vehicle The economic impact of the combined natural resource industry is compelling. In addition to the stalwarts (forestry –\$10.2 billion, agriculture –\$1.2 billion, and fishing – \$800 million),the estimated direct spending on outdoor recreation could be as high as \$3 billion, contributing to a \$6.2 billion tourism economy.1A 2001 survey shows that Maine’s wildlife-related economic contribution is fifth in the nation in terms of the percentage of gross state product.” (Source: http://www.maine.gov/spo/natural/gov/docs/ex_summary_brochure.pdf)

How might recreation impact natural resources? One impact often gives rise to more, creating a cascading effect that may become difficult for land managers to control. Changes in water quality and alteration of surface flows impact water. Compaction and erosion often degrade soils. Non-native flora and fauna can be introduced into the ecosystem, causing shifts in the balance from native to non-native species. The frequency of wildfire can change, causing shifts in the flora and fauna of an area. Recreation leads to an increase in the use of energy, especially fossil fuels, leading to air and water pollution. Noise pollution may alter natural range and habitat especially critical to sensitive species. And, how do we manage human waste that is a by-product of our lifestyle?

These are only a few of the potential impacts. And, all are intertwined. A prime example: as soils are disturbed they may erode with resulting debris creating runoff into nearby streams, thus changing the water quality. The change in water quality may have serious repercussions for native species that rely on cleaner water. Non-native species may out compete native species if they can tolerate the sediment load while the natives do not. This, of course, is a simplified version of a possible chain of events. In reality, the impacts are far more extensive and complicated.

There can also be positive impacts of recreation, both to the participants and the resource. In someplace the development of ecotourism has helped provide an income for an community while protecting the resource from exploitation or development.

Some questions to ponder:

- What is your favorite recreational activity? How do you think this activity impacts natural resources? (consider both positive and negative impacts in the areas of environmental, economic and social impacts)
- How might you reduce any negative impacts that directly or indirectly result from this pastime while increasing or maintaining the positive impacts of the recreation?
- What might be the impact of limiting certain recreational activities? Is preservation (no use) better than conservation (managed use)? How can we manage use in order to minimize negative impacts?
- In the face of increasing demand for both traditional and new forms of recreation, how can we balance our need to enjoy the natural world with maintaining the quality of the environment as well as balancing economic and social concerns?
- Although recreation can add significantly to both local and state economies, are there options through preservation and conservation to off-set the losses due to increased recreation?

- Effective plans rarely depend on only one tool for management. How can the range of management strategies you propose be chosen to most fit the unique characteristics of your study area and be used effectively and appropriately?

ENVIROTHON MAINE'S – CURRENT ISSUE PROBLEM STATEMENT 2008:

- 1) **Your team will research what forms that outdoor recreation takes in your community. Be sure to consider different age and cultural groups.** Are there officially recognized recreation spots in your community? Are there informal recreational spots in your area? How and why do people access and make use of these places? How do they impact the wildlife, soils, water quality, forestry and economics of the area? Consider the positive aspects of outdoor recreation including concerns about “nature deficient syndrome” – see the resources, health benefits, a connection to the environment, and strengthening a sense of place.
- 2) **From your research, chose a recreational location within your community and research what works about it or what can be improved about it.** Review the town comprehensive plan and open space plans, or other plans, relevant documents; talk to the people that put them together and additional related resource managers. What were their thoughts about the recreation issues they encountered? What were their priorities? Do you agree? Introduce yourself to organizations, businesses agencies parks and individuals who are involved in the selected recreational site. What are their concerns and interests in that site? Talk to some one over 60 that might have used this site as a child and find out what changes have occurred since they where a child? What changes might occur in another 60 years to this site given the current use. Are there areas of concern today that should be addressed sooner rather than later?
- 3) **Develop an oral presentation** that shows the results of your findings? What impact does this recreational venue have on the community and ecology of land? What might you offer as suggestions for improvements to minimize potential environmental issues that arise through use?
- 4) **Create a poster** to show the current status of the selected recreation site, the pros and cons and develop a long range plan for the site that you feel would promote sustainable use for this recreational site that incorporate the wildlife, forestry, soils, water and economics of the community.

EXPECTATIONS FOR POSTER PRESENTATIONS

Project Overview: Provide a *project name/title along with a brief description of your Recreational Project* idea. Where is this site located? How big an area? What size and type of population uses it? Include a *diagram or artistic rendering* depicting the site and the property in relation to the community affected.

Recreational Impacts: Compare and contrast *the pros and cons* of this recreational site. After talking with resource people, planners and people who use the recreational site, what are the short and long-term impacts to the environment and the community to this recreational site. What suggestions can you make to enhance this site over the long-term? Make sure to address resources concerns including soils, aquatics, forestry and wildlife and any other affected resource.

Implementation Details and Timeline: Provide a *brief overview of the project details including summaries of findings, length of time the recreational site has been used, changes over time and future change or trends, and include current and future concerns.* Develop a time line and a list of contacts to implement your suggestions to the recreational site.

You will be judged on your overall understanding of how the recreational site impacts your community and our natural resources now and for the future. GOOD LUCK!!!

Resource Listings

http://www.maine.gov/doc/publications/traditional_use/TFMeetings/Meeting3/EconImpact-HuntFishWWSnowmobile.pdf

http://www.maine.gov/spo/natural/gov/docs/ex_summary_brochure.pdf

<http://www.maine.gov/doc/parks/programs/SCORP/PDFs/impsummary.pdf>

<http://www.maine.gov/doc/parks/programs/SCORP/PDFs/4.pdf>

<http://www.maine.gov/dep/blwq/doclake/econlong.pdf>

http://www.maine.gov/doc/parks/programs/ATV/atv_plantrails.html

Leave No Trace <http://www.lnt.org/index.php>

Outdoor Industry Association <http://www.outdoorindustry.org/>

National Recreation and Parks Association <http://www.nrpa.org/>

The benefits of outdoor recreation (“nature deficeit syndrome” - <http://www.cnaturenet.org/>

Beginning with Habitat” website :
<http://www.beginningwithhabitat.org/>

Students should refer to their resource information on soil, water, forestry, and wildlife to think about possible impacts and management strategies to minimize the negative impact on the environment.

Find resources and talk to management individuals unique to the area in their community that they are studying such as: planning documents, planners, resource managers, adjacent landowners, business owners and recreation commisions and park officials.

Some of the reports mentioned above that discuss:

- Environmental impacts
- Econimic impact
- Social impacts

Application of your findings:

The work you do on this current issue could be of great use to your community. We highly recommend that you consider sharing your conclusions in an appropriate meeting (for example with the managers of your study area, local planning or conservation commission or town

manager) and with the local media.

If you have any such meetings or press releases, Maine Envirothon would be very interested in receiving a copy.

Your team may also find it rewarding to apply their recommendations to a service learning requirement. This might also be used to help fulfill student's public service requirement for their school. If the students implement a service learning project, at ANY time, please send us a summary of your project.