

## **Massachusetts Envirothon 2008 EVALUATION HIGHLIGHTS**

**Compiled by Will Snyder, UMass Extension**

The 2008 survey of Massachusetts Envirothon participants asked coaches and team members to think back over the past year and rate the extent to which participation in the Mass Envirothon had resulted in a change in their knowledge, skills, and interests. Coaches were asked to rate their students' change as well as their own. In addition, current issue judges were asked to assess overall strengths and weaknesses in the teams whose work they saw (by judging presentations or visiting roundtables).

A record proportion of the surveys distributed were returned by team members and coaches.

This is a simple summary of informal findings that can provide some insight into the program's success, particularly the student learning that is occurring. More detail is available by contacting Will Snyder, UMass Extension, at [wsnyder@umext.umass.edu](mailto:wsnyder@umext.umass.edu).

### **Gains in Youth Knowledge and Skills**

*Knowledge of Ecosystems and Natural Resource Management.* Overall, approximately 64% of team members reported an increase to a moderate or great extent in their knowledge of water, forest, wildlife, and soil resources. 96% of coaches reported seeing an increase to a moderate or great extent in their students in this area.

*Knowledge about Outdoor Recreation.* 85% of team members reported that their Envirothon experience had increased their knowledge of outdoor recreation and open space issues to a moderate or great extent (52% reported an increase to a great extent). 76% reported a moderate or great increase in their knowledge of state parks in their area. 81% of coaches saw a great increase in their teams' knowledge of outdoor recreation issues; only 6% saw only a small increase.

*Teamwork.* 89% of team members believed their Envirothon preparation had increased their ability to work with others as a team to a moderate or great extent. This is up significantly from 76% in 2007. Coaches concurred, with 96% reporting that they had seen an increase to a moderate or great extent in their students' teamwork. 64% of judges believed that teamwork and initiative were areas of consistent strength among teams.

*Community Research.* 83% of team members felt that their ability to investigate community environmental issues had increased to a moderate or great extent. However, teams were somewhat less confident on several specific research skills: ability to contact and talk to officials in town government or state agencies (70%), knowledge of how environmental decisions are made in your community (75%), and ability to use maps and GIS as a source of information (62%).

*Presentation Skills.* 88% of team members reported that their ability to make an effective presentation had increased to a moderate or great extent. 87% of coaches agreed. 30% of

current issue presentation judges saw presentation skills as an area of consistent strength, but most judges reported significant variation in the quality of presentations.

## **Developments in Youth Attitudes and Values**

*Community Service.* Similar to the 2007 survey, approximately 80 % of team members reported a moderate or great increase in their interest in community service. However, only about a quarter of participating teams completed the requirements for the Community Action award.

*College and Career Plans.* 67% of responding 2008 team members (in contrast to 55% in 2007) reported that their Envirothon experience had increased their interest to a moderate or great extent in further education and careers related to the environment.

*Ecological Footprint.* 84% of participating youth also reported that their interest in “reducing your own energy/environmental impact (your own ecological footprint)” had increased to a moderate or great extent. This is a slight increase over 2007.

*Spending Time Outdoors.* 85% of team members reported that they now had a greater interest in spending time outdoors as a result of their involvement with Mass Envirothon and the Outdoor Recreation current issue. This item drew the most emphatic response on the survey, with 56% of the young people saying that their interest had increased to a great extent.

## **Professional Development**

More than two thirds of the coaches responding to the survey reported that their involvement had increased their knowledge, skills, and interests in all areas of Envirothon work, from ecostation topics to coaching presentation skills, to reducing their ecological footprints. Areas of greatest increase were knowledge of open space and outdoor recreation issues, knowledge of Mass Envirothon ecostation topics, and interest in reducing their own ecological footprints.

## **Who Participated?**

Mass Envirothon again drew a significant number of new participants this year:

Of those coaches who returned surveys, 1/3 were coaching an Envirothon team for the first time in 2008.

Of team members returning surveys, 1/3 were juniors, 1/3 were seniors, and 1/3 were freshmen or sophomores. For nearly 2/3 of these participants, 2008 was their first year participating in the Mass Envirothon.

Mass Envirothon participants do not reflect the diversity of Massachusetts public schools in general:

The following table suggests that the program is particularly lacking in African American and Hispanic participation. This is an area where better data collection is essential.

	Mass Envirothon	All Massachusetts
African American	1.4%	8.1%
Asian	8.7%	4.9%
Hispanic	2.9%	13.9%
White	84.6%	70.8%
Native American	-	0.3%
Native Hawaiian, Pacific Islander	-	0.1%
Multi-Race, Non-Hispanic	0.7%	1.9%
Other	3.6%	-

### **Success of Program Modifications**

Mass Envirothon made several changes in program design this year. Major changes: The competition was split into two field days, with a final competition a week later. Also, fewer workshops were offered through the year, but those workshops were larger and offered more sessions. Minor changes: At the field days, coaches were offered a variety of activities, including viewing other teams' presentations, and alternates were organized into teams and allowed to participate in the competition.

Coaches were asked for their assessment of these changes as well as for their assessment of their experience on the field days. The response captured by the surveys was overwhelmingly positive. In particular, the change to a two day field competition was greeted with enthusiasm. Coaches remarked on the lack of crowding and the less frantic pace. There were no negative comments about the lack of an awards ceremony on each day.

Coaches also liked the mix of activities available to them for the day.

There appeared to be at least one problem with some members of an alternate team not taking the testing seriously, and another about such teams competing for resources at the test sites. However, the idea of alternate teams received positive reviews.

### **Summary**

Survey returns from students, coaches, and judges strongly indicate that Mass Envirothon 2008 offered a rich, positive youth learning experience not only in natural resource and environmental knowledge areas, but also in teamwork, presentation skills, and community research. Coaches indicated that the experience had been a learning experience for them, as well.

The significant program modifications instituted this year, particularly the change to a choice of two days of field competition, were very successful from the perspective of participants.

Our first survey of participant diversity indicated that we do not reflect the racial/ethnic diversity of Massachusetts schools. There is room for continued creative program development and recruiting to address this issue.