

## 4-H Great Lakes & Natural Resources Camp – August 2-8, 2015 Conference Demographics and Evaluation Report

The 33<sup>rd</sup> 4-H Great Lakes & Natural Resources Camp was attended by 61 campers and 12 counselors from 30 Michigan counties. Staff totaled 26 FTEs.

This residential camp has 70 intentional contact hours. The content and instructional methods are research-based (environmental education, place-based education, experiential learning and youth development). The camp sessions expose youth to four of the five Michigan Department of Education science curriculum standards in earth science and three of five standards in biology.

Sessions teach ecological concepts such as fisheries management, limnology, wildlife, invasive species and forestry. Recreation options such as kayaking, sailing, snorkeling, and archery let campers try something new and have fun responsibly in the outdoors. The evening programs focus on team building, environmental policy making, teaching others, and empowering youth to take on leadership roles.

### Camper Demographics

The target camper age range is 13 to 15 years old; however, five campers were still age 12 and one was age 16.

The below percentages are based on those that provided race/ethnic information.

<u>Number</u>	<u>Percentage</u>	<u>Racial/Ethnic Category</u>
59	88.1%	Caucasian/White
0	0%	Black/African American
2	3.0%	Hispanic
2	3.0%	American Indian/Alaskan Native
1	1.5%	Asian
3	4.5%	Mixed Race

A total of 12% percent of campers were people of color.

<u>Number</u>	<u>Percentage</u>	<u>Camper Gender</u>
37	55.2%	Male
30	44.8%	Female

<u>Number</u>	<u>Percentage</u>	<u>Past 4-H GLNR Camp Experience</u>
51	76.1%	Never attended
16	23.9%	Previously Attended

<u>Number</u>	<u>Percentage</u>	<u>4-H Member</u>
39	58.2%	4-H Member at time of camp enrollment
28	41.8%	Not in 4-H

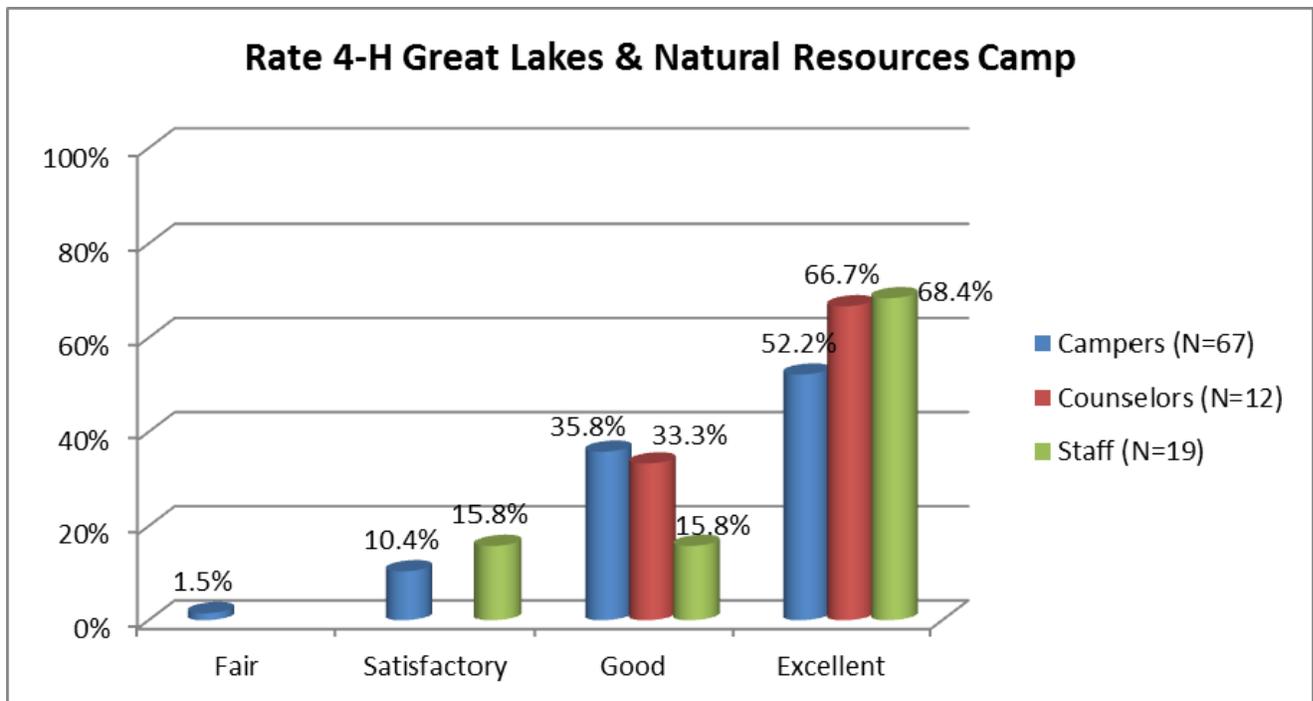
<u>Number</u>	<u>Percentage</u>	<u>Residence Description</u>
12	17.9%	Farm
28	41.8%	Rural
25	37.3%	Suburban
2	3.0%	Urban

### Evaluation Results

Post-camp surveys were distributed to campers, counselors and staff. A different survey was used for each group. The camp evaluations measure camp objectives which are:

- Increase teens' appreciation and enjoyment of the outdoors, natural resources, and science.
- Increase teens' knowledge about the Great Lakes, natural resources ecology and management issues.
- Develop strong attitudinal attachment to Michigan's unique natural resources and bioregional features.
- Foster scientifically rooted environmental stewardship.
- Develop and expand career and personal interests.
- Develop leadership skills and self-confidence.
- Increase social and academic skills needed for a successful transition to college and life as an adult.

A summary of the evaluation findings follow. Camper open-ended comments to the question "What impact has attending 4-H Great Lakes & Natural Resources Camp had on your future?" are at the end of this summary.



Note: rating the camp as good or excellent were:  
 88% of campers  
 100% of counselors  
 84.2% of staff

### **CAMPER ONLY RESPONSES**

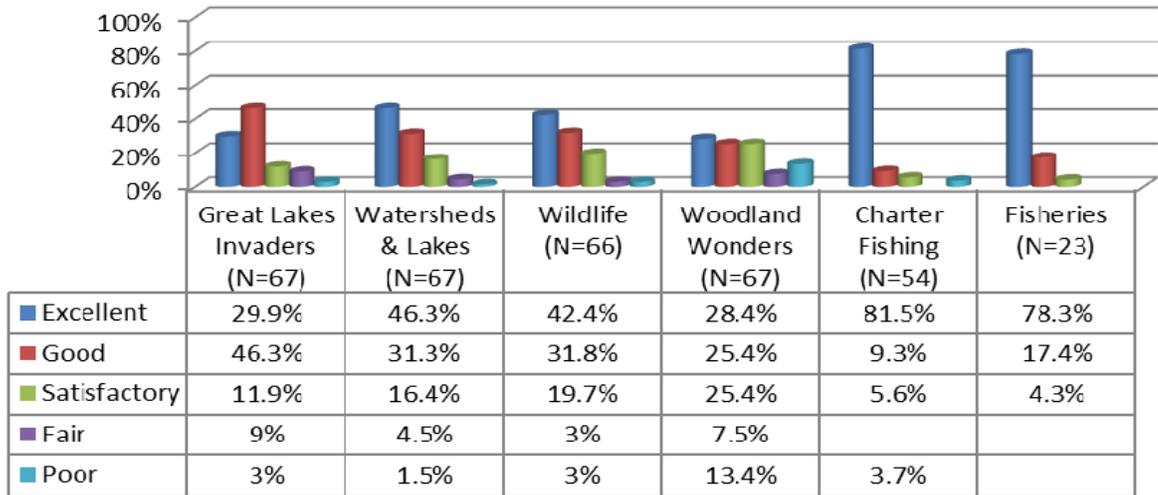
Would you recommend 4-H Great Lakes & Natural Resource Camp to others? (N = 65)  
 89.2% Yes

I plan to take part in more outdoor natural environment activities in the future? (N = 67)  
 92.5% agree

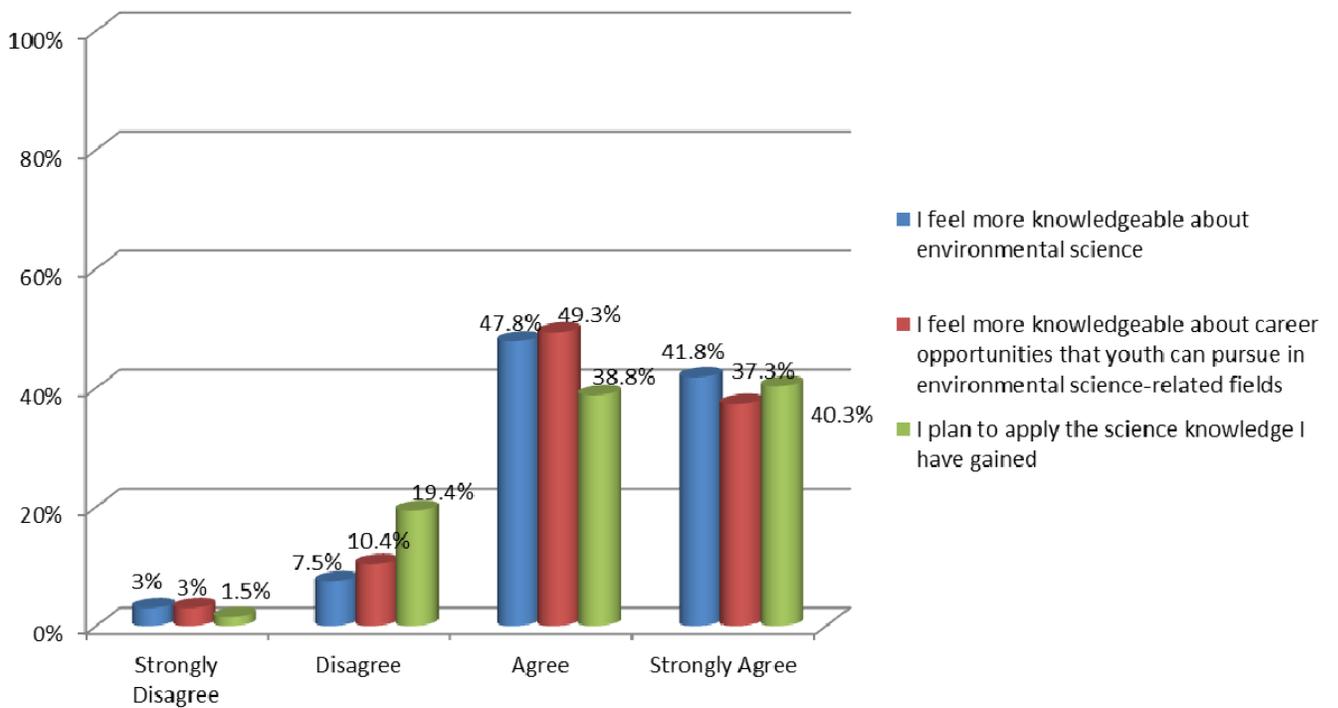
Do you participate in any environmental or natural resource activities through your 4-H club? (N = 67)  
 49.2% Yes      36.9% Not in a 4-H club

### **CAMPER ONLY RESPONSES**

## Great Lakes Ecology Exploration Morning Session Ratings



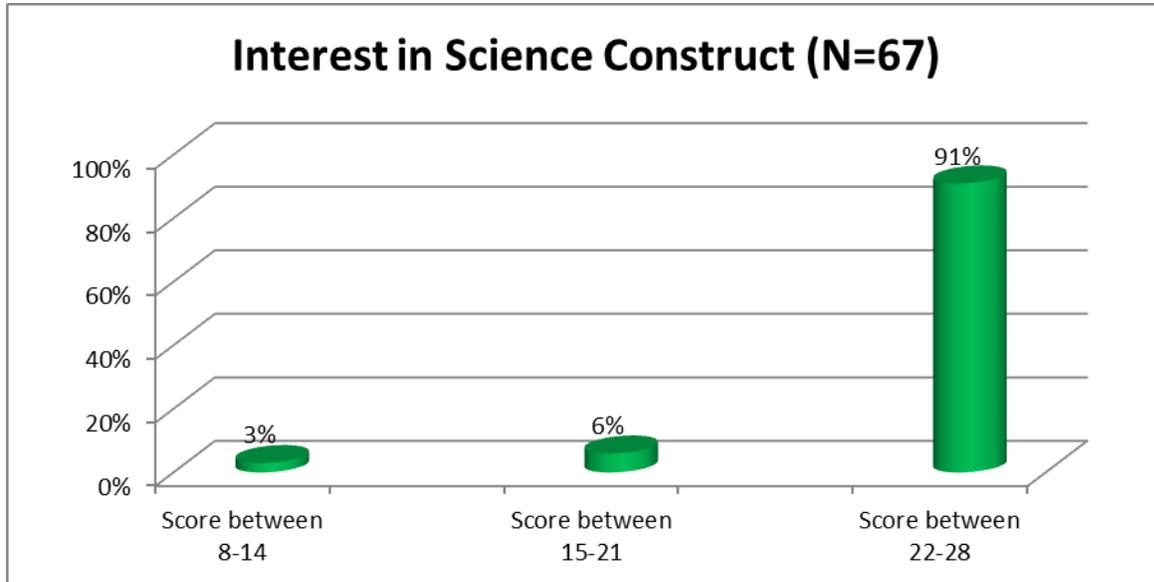
## Environmental Science, Career, Knowledge & Science Application (N=67)



## CAMPER ONLY RESPONSES

### **Science Interest:**

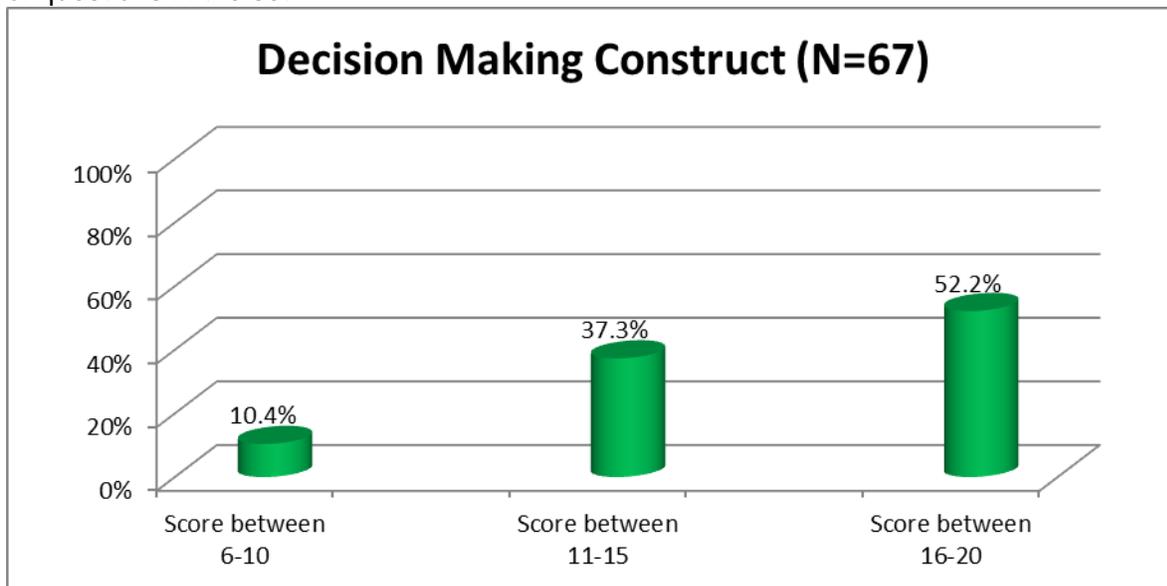
To measure science interest, a seven question construct from the National Youth Life Skills Evaluation System was used. Each question's response was a score, 1 for Strongly Disagree to 4 for Strongly Agree; when summed the construct score indicated their level of interest in science.



Score ranges of 8-14 are low end indications of interest in science.. Scores of 15-21 are mid-range, scores of 22-28 depict campers who indicated a high level of interest in science.

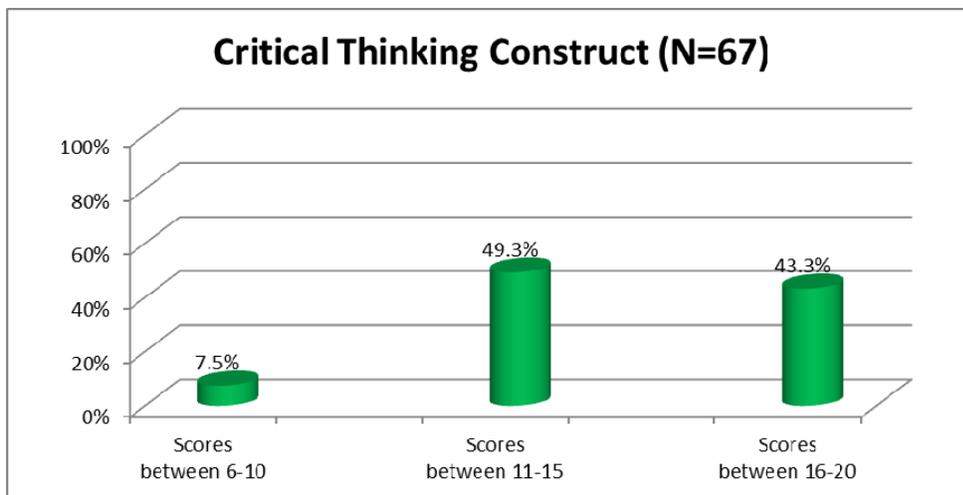
### **Decision Making, Critical Thinking and Problem Solving:**

These three STEM-related life skills were measured with constructs of five or six questions. These question constructs are being used in Michigan 4-H and in 4-H nationally to measure STEM-related life skills. They are adapted from the National Youth Life Skills Evaluation System. These graphs show construct score totals for each question set. The highest score was 20 or 24, depending on the number of questions in the set.

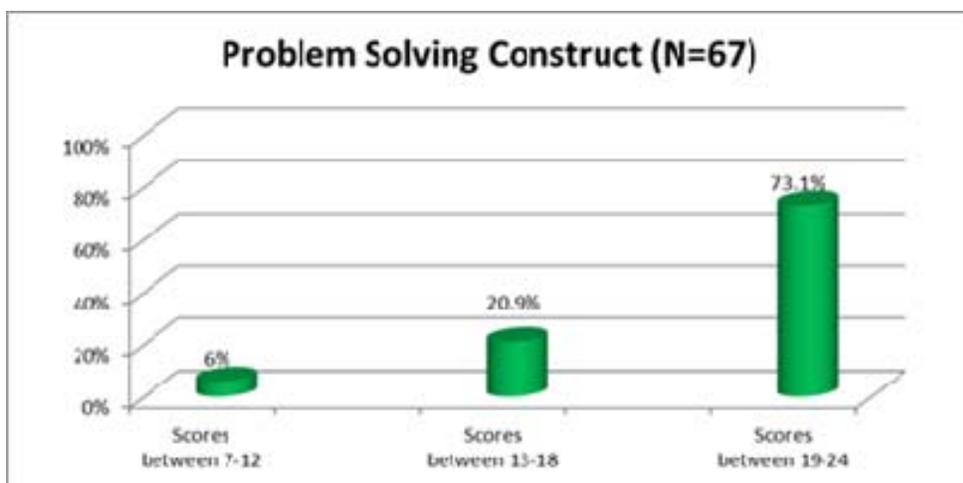


Score ranges of 6-10 are low end indications of decision making ability. Scores of 11-15 are mid-range, scores of 16-20 depict campers who indicated a high level of that life skill.

## CAMPER ONLY RESPONSES

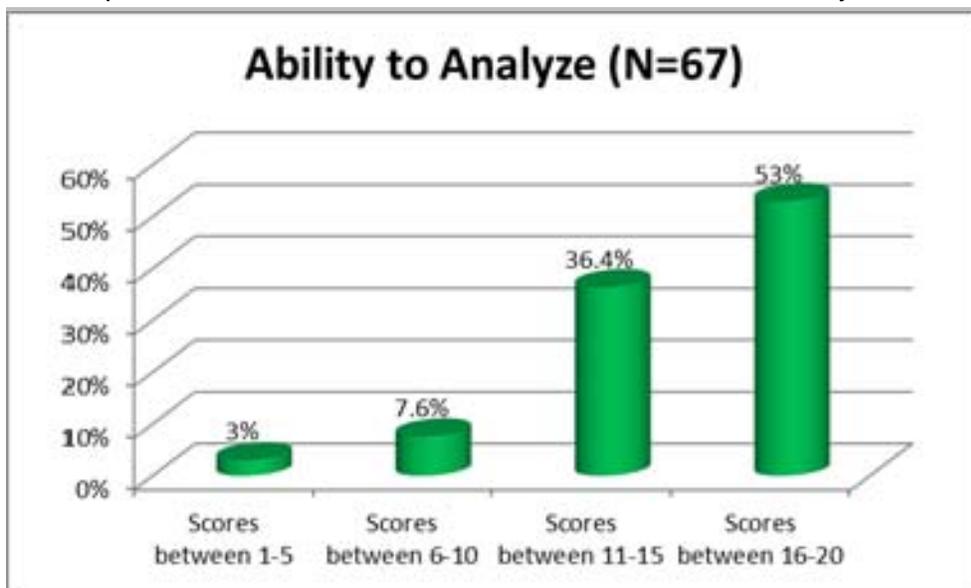


Score ranges of 6-10 are low-end indications of critical thinking ability. Scores of 11-15 are mid-range, scores of 16-20 depict campers who indicated a high level of that life skill.



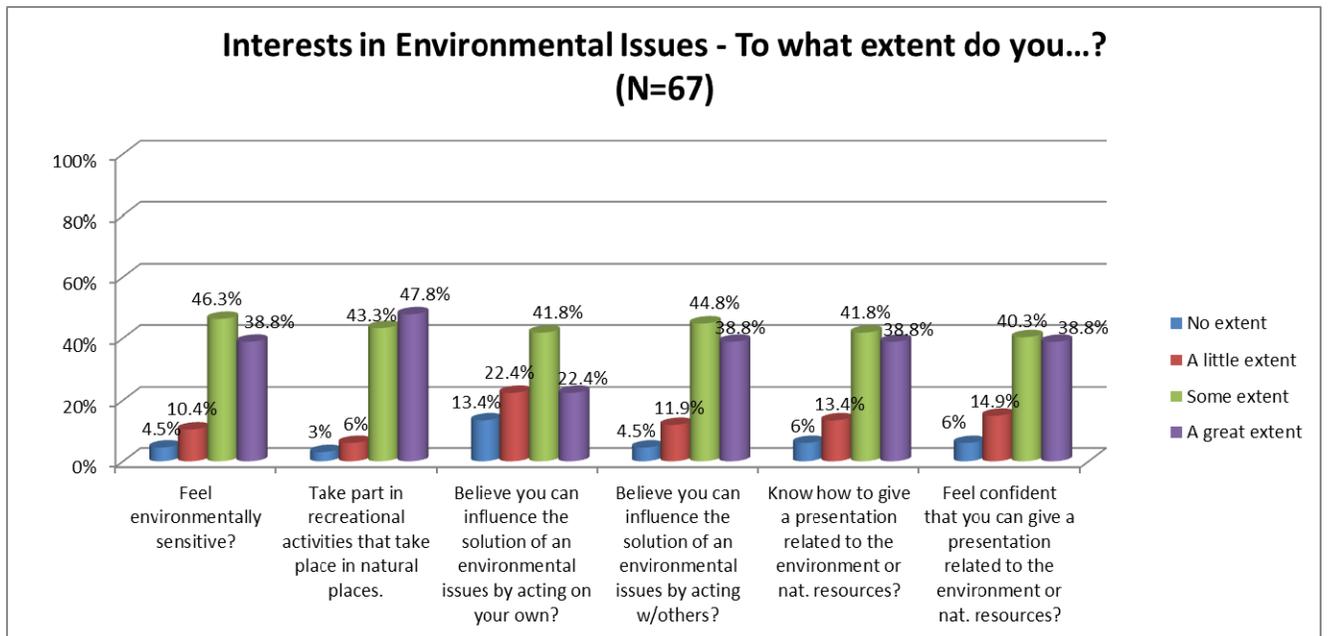
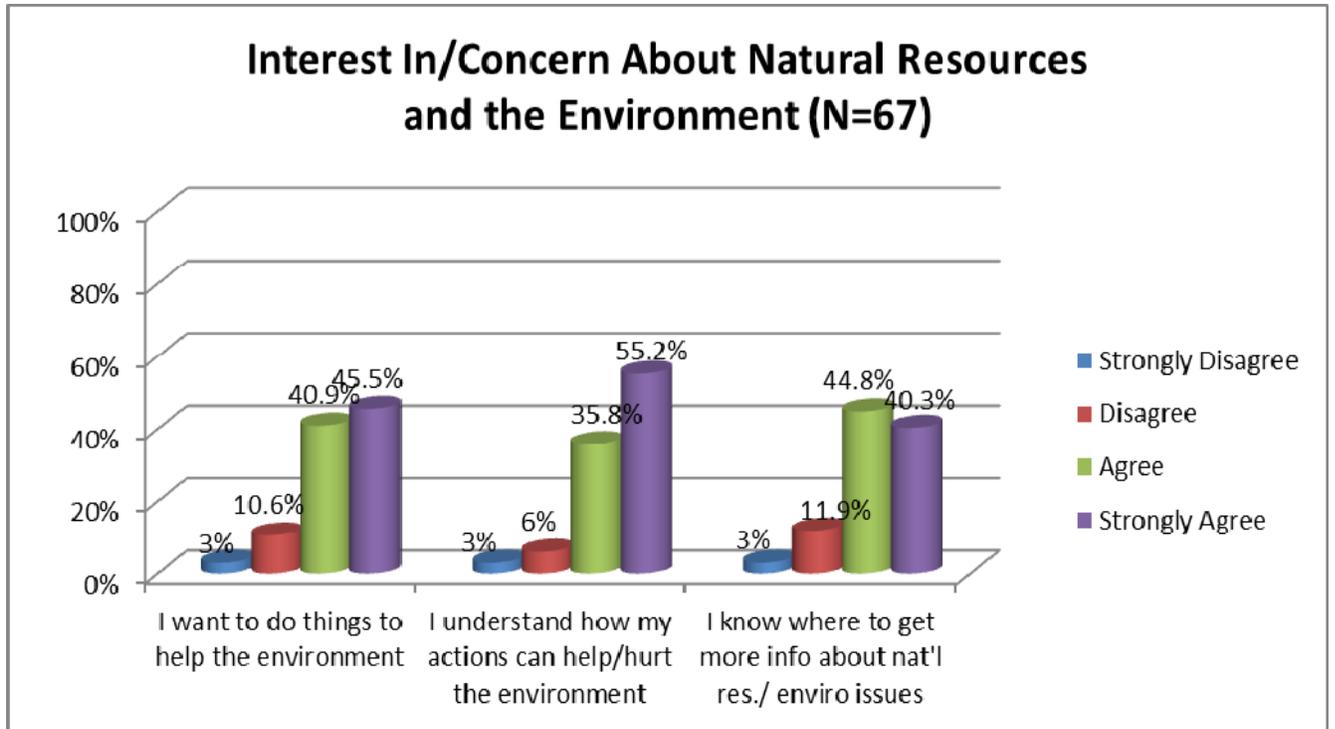
Score ranges of 7-12 are low-end indications of that life skill. Scores of 13-18 are mid-range, scores of 19-24 depict campers who indicated a high level of that life skill.

**Ability to Analyze:** This cognitive life skill question construct came from the Program Evaluation Network (PEN) widely used by 4-H nationally to measure youth life skills. It was selected because the STEM questions from the National Youth Life Skills Evaluation System don't assess analytical skill.

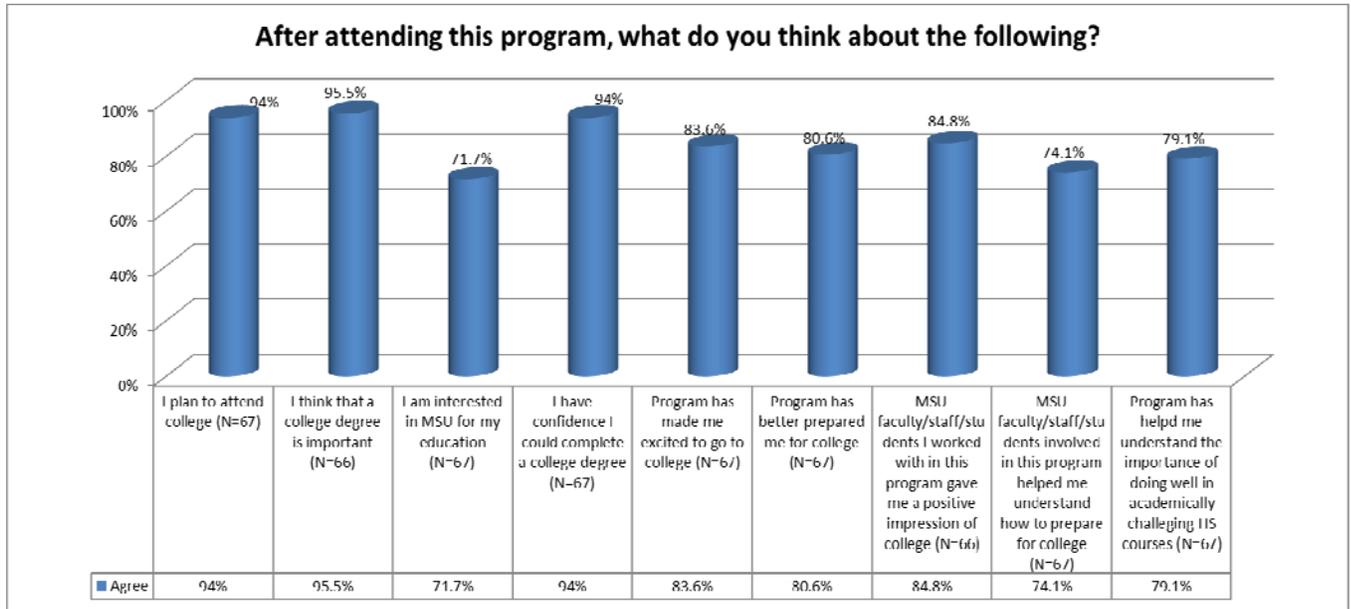


Score ranges of 1-5 indicate none or extremely low ability to analyze. Scores of 6-10 are low end indications of that life skill. Scores of 11-15 are mid-range, scores of 16-20 depict campers who indicated a high level of that life skill.

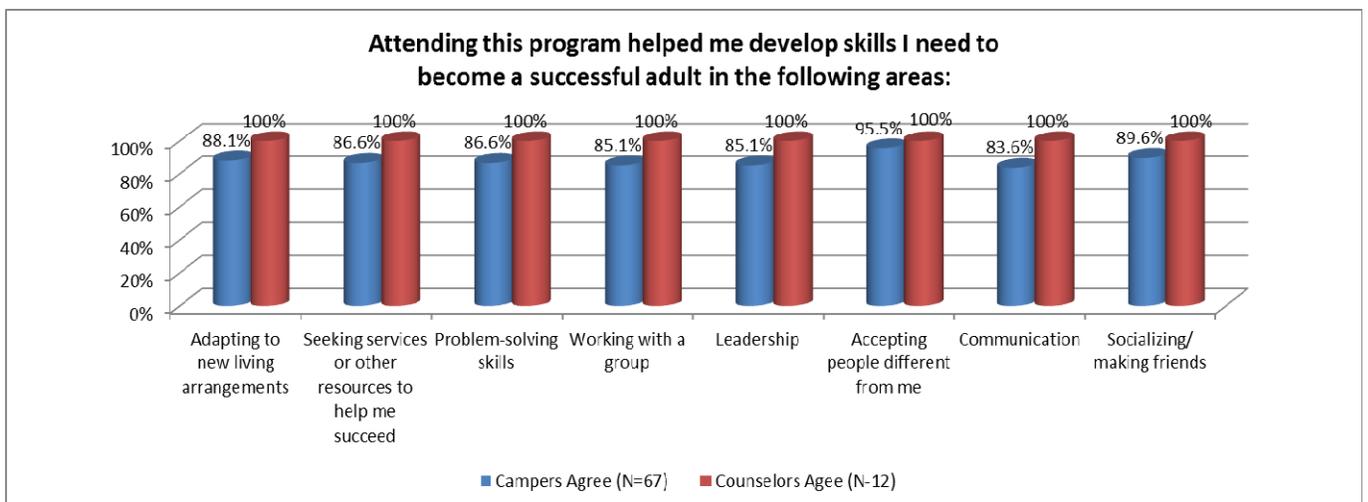
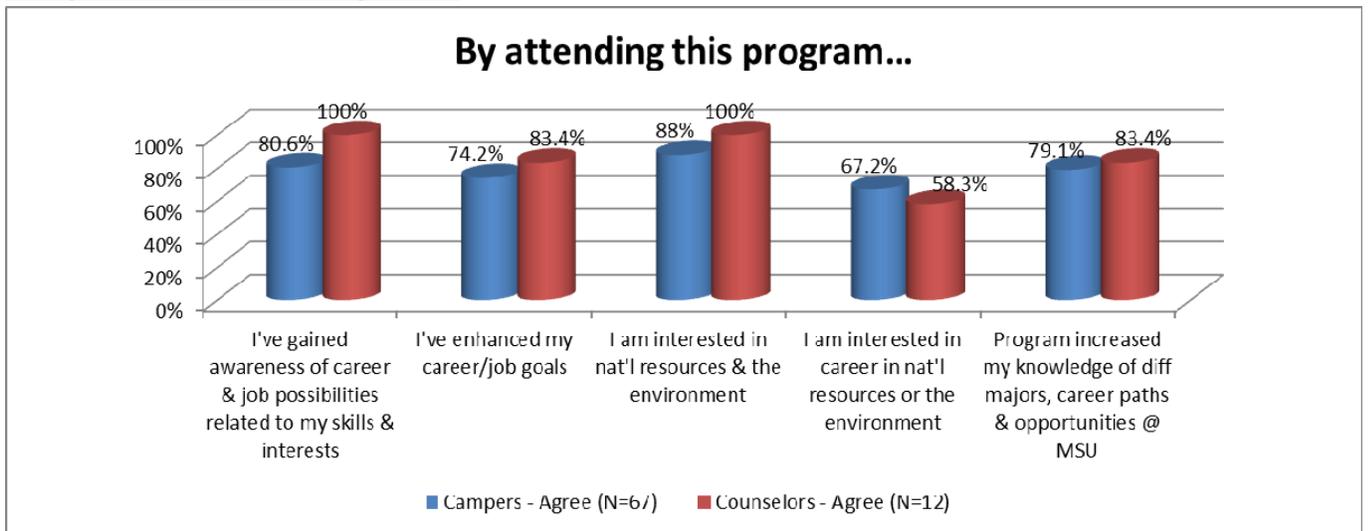
## CAMPER ONLY RESPONSES



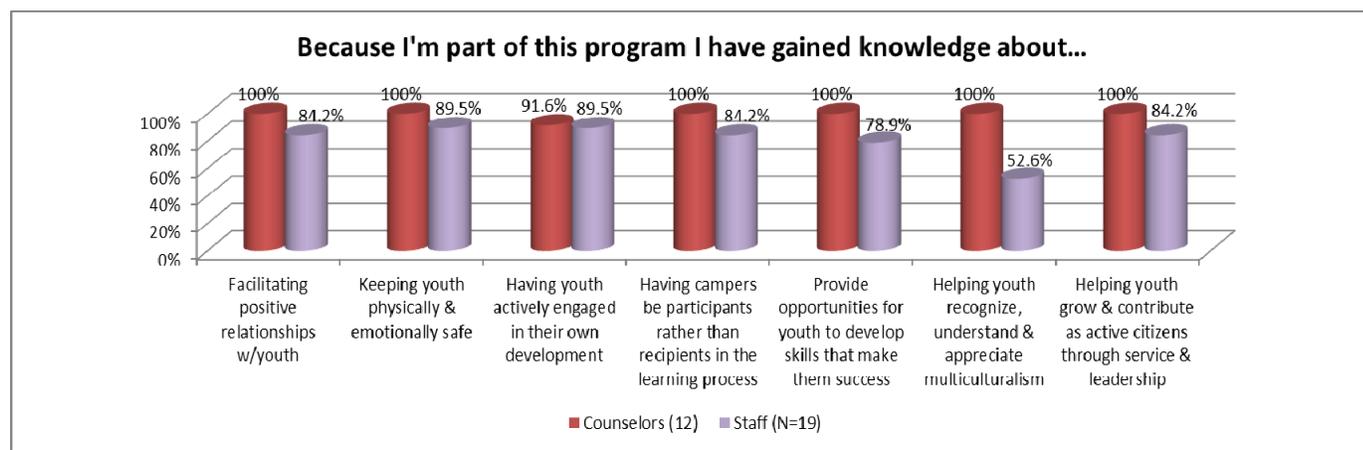
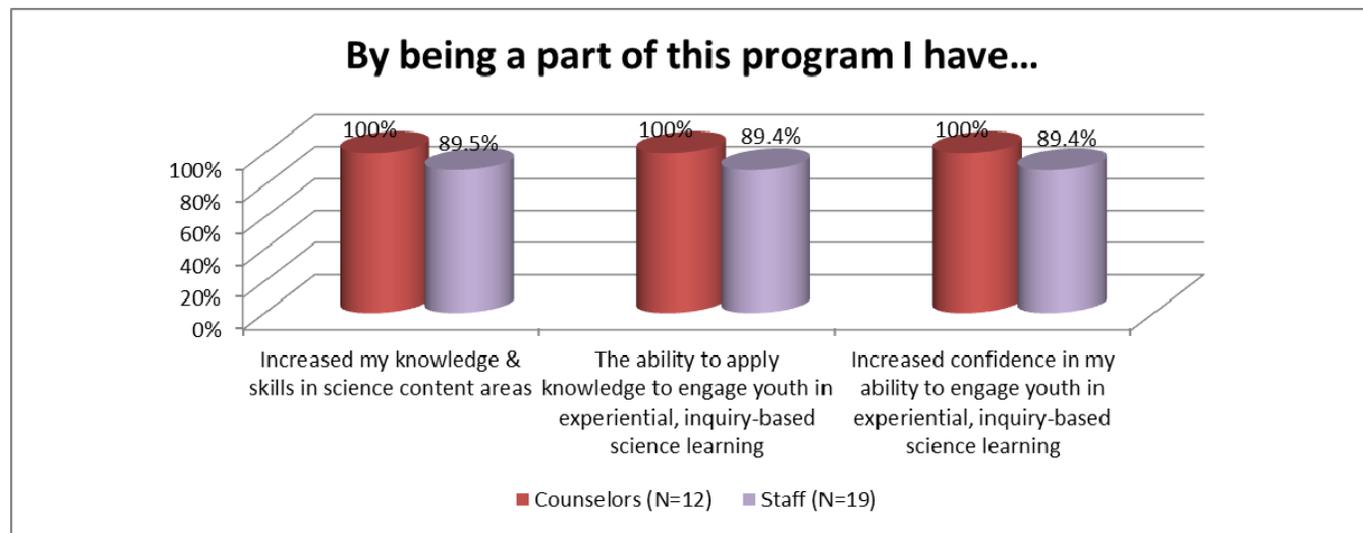
**Camper Only Responses – MSU Pre-College Program Questions**



**Camper & Counselor Responses – Interest in/Concern about Natural Resources & the Environment**



## COUNSELOR & STAFF RESPONSES



## Camper Afternoon Recreation Top Picks

Campers were asked to list their two favorite afternoon recreation activities. See summary below:

22	Sailing	4	Fish Processing
21	Snorkeling	4	Lighthouse
13	Kayaking	4	Wild Edibles
9	Outdoor Survival	3	Electro Fishing
8	Archery	3	Marine Sanctuary
8	Quarry	2	Music
6	Rifle	2	Robotics
5	Sea Lamprey		<i>Other offerings weren't listed as favorites.</i>

## Camper Evaluation Comments - 2015

County	Comments
Alpena	Camp has increased my confidence and problem solving a lot. It has affected me very positively and I really enjoyed myself.
	Camp has affected me by teaching me more about job ideas and to never give up. I learned how to make awesome friends with my lake group. I figured out my problem skills were pretty well.
	I think camp has made me a lot more knowledgeable about outdoors and I really like it.
Arenac	I will be more careful with plants and water life now. I feel more knowledgeable about that now.
Calhoun	Camp made me want to pursue a career in biology or chemistry. I have increased confidence, problem solving and bravery. The way the all the staff talked made me want to interact more than I would of.
Cheboygan	They help me think about invasive species. It made me think of how to help get rid of it.
Clinton	I feel that this camp has given me confidence in public speaking and has prepared me well for the challenges ahead, aside from being super fun.
Eaton	I would want to learn more and more about natural resources.
	Camp has shown me that teamwork is important and without it, you could fall flat on your face. I want to be an engineer so this camp did not change my current anticipated career path. I have always loved outdoors, so this camp just enhanced my love of nature.
Emmet	It helped me narrow down what kind of job I want and taught me how much fun it could be.
Gladwin	This camp has helped me think of other things I want to do in the future when I go to school and when I get my job. This camp has made a big change in my life. It makes me look at life a lot different and it's a very good thing.
	It made me get interested in natural resources.
Hillsdale	It has helped me in a way to understand the problems we have in our lake and how we can fix them and how to prevent.
Ingham	Camp has impacted my future by teaching me lots of new information about natural resources. I never really planned to have a career in natural resources, and I still don't, but I'm now aware of programs where I can make a difference, like YCC. If I were interested in a future in the sciences, camp would have helped expand my horizons greatly. However, I learned very much and am glad to have attended 4-H camp!
	I think this camp has given me a broader knowledge of potential career opportunities. I think it has had a positive effect on my confidence. Overall, it was a very positive experience.
	This camp has made me think that working as a faculty at a camp like this would be a great experience. My life time goals have not changed much although I would like to teach students through a program like this after I graduate from college.
	It gave me a career path change idea to be a biochemist because there is so much more than marine biology.
	This camp showed me many different careers that interest me and I may pursue in college. I went to this camp to expand my horizons for the most part but I thought it was a good camp.
	It has not really affected my career choice (I still want to be a veterinarian) but I think it helped me feel more confident about getting up and presenting to other people.
Iosco	Attending camp opened me up to the 4-H programs and different stuff in the outdoors and I want to go into a major in the outdoors.
	I had a lot of fun.
Kent	As a result of attending great lakes natural resources camp, I am more confident in my leadership and problem solving skills.
Leelanau	Not really, my career choice has been the same for a while. It affected my friendships.

	I was interested in the natural sciences before, but this camp has made my love for them grow. Spending a whole week learning about them has been a great experience This year at cap was my first year without a friend here, and I've made friends I will keep in contact with.
Livingston	This camp has really helped me find my way. I have so many ideas for future jobs. It hasn't affected my career choice, but boosted my confidence.
Macomb	Make good decisions in life so I have a life and a good job I like. Camp taught me a lot about nature and has got me interested in new things-like invasive species and has opened up a whole new nature related things to read and learn about.
Mackinaw	I've learned a lot of stuff and I feel more smart and knowledgeable and I learned some science too.
Manistee	I already was planning to go to college and now I want to go into scientific study but camp opened up new career choices for me. Thank you!
Midland	This camp has affected me greatly and made me realize that there are a lot of jobs that I didn't know about. But I'm not necessarily interested in them. But this camp has helped me with my problem solving skills enormously.
Montcalm	Camp has affected me positively because it gave me more confidence I my decisions and not be hesitant on being wrong. Camp has helped me understand that listening to others is very important. It has taught me how to work better without force or command and I am still setting my career goal to be a vet.
Oakland	It has increased my confidence with socializing and public speaking. It has also given me an idea of job opportunities. Attending this camp has absolutely changed my life. It has increased everything listed above as well as having and meeting new friends and people. I am so thankful for everyone at this camp. This camp has made me think about how we treat our world, in good and bad things. I have learned so much useful knowledge to help me in my present and future. 4-H Great Lakes camp is the best. It has brightened my day and now the fog is gone. Camp has shown me the different careers I can have in environmental science. It taught me good problem solving skills. I always have loved science, but camp showed me new sciences hat I also like. I am really glad I came to camp.
Osceola	This camp has impacted me in a way that changes my opinion on the different fields of research. The camp has also impacted my expansion of career choices.
Ottawa	It has affected me in many ways like making friends, being in a new environment and many other ways.
Presque Isle	Camp has improved my knowledge of my home environment and my public speaking the most.
Saginaw	Since I enjoy and am good at science topics, I want to major in engineering or another science based field. This camp has made me appreciate nature and science more than before and has made me excited to study science more in the rest of high school and college in the future.
Sanilac	This camp has opened new doors for my career and I will use the things I have learned. I have opened my eyes to new career choice and want to do more to help with invasive animals, plants etc. It has made me feel a lot about 4-H. It has affected me greatly. It has widened my occupations.
St. Clair	The staff made me feel comfortable talking about what I wanted to do in the future. It helped me in many ways. It affected me and made me want to learn more about nature. It has increased
Tuscola	It has definitely impacted me that I need more confidence and eye contact when presenting. Also that there are many ways we hurt the environment and that we can help as well.

	It has let me learn that I can do something in natural resources as a career, contrary to my friend's beliefs.
	Because of this camp, I realize that there are a lot more careers available to me related to natural resources.
	As many of the camps I've attended have, I'm so much more confident in myself. Being here with only three other people I know (none of which were in my cabin) helped me become less shy and more adventurous.
Van Buren	It has influenced me to become a marine biologist and help protect the natural resources. It was also a big confidence booster.
	Now I want to go into invasive species career choice and I now have friends for life.
Wash-tenaw	Camp is really great in so many ways. It opens up so many career possibilities I had never even heard of and gives me a chance to learn more about them by doing what the actual individuals in those fields do. I feel much more confident about my future! Thanks!
	This camp has really brought the importance of the environment to me. I now want to learn more about how to help the environment. I can spread this information to other people.
	This camp has made me realize that my dreams of joining the DNR should be followed.
	Camp has affected me in the following: given me more to think about in terms of jobs, increased my problem-solving ability and allowed me to make new friends.
	Camp has made me more aware of natural resources and the careers within it. It has also shown me how fragile the environment can be and how easily it can be thrown out of whack.
Wayne	It has shown me things that I did know. It's pushing me more to the army and that's what I think.
No county listed	