# 2010 Lake Huron Environmental Teachers' Workshop



Final Report

#### SUMMARY

The Lake Huron Environmental Teachers' Workshop took place September 14, 2010 in Goderich Ontario at the Knights of Columbus Hall. The workshop evolved from feedback that organizers received during the Lake Huron Environmental Youth Summit held in September 2009. Teachers expressed a need for their own educational forum that would provide them with the information and resources needed to properly teach their students about agricultural and environmental issues along the Lake Huron southeast shore.

There were several meetings in spring, 2010 with two teachers from Goderich District Collegiate Institute, the Regional Environment Education LEED for the London Region, Jacqui Laporte (OMAFRA) and Mari Veliz and Jenni Boles (ABCA). These meetings helped formulate the goals of the workshop. The teachers expressed a need for resources, lesson plans and local information about agriculture, species at risk and environmental issues. A date of mid-September was set. A flyer and registration form were created in May and circulated to school boards along the Southeast Shore. A cap was set at 25 participants due to limited funds for supply teacher costs.

The teachers indicated that it would be helpful to meet and network with professionals and community volunteers who could provide them with environmental information for their classrooms. An agenda was created to include three key speakers as well as provide a 'speed meeting' session among the teachers and networkers (see Appendix 1). The goal of the workshop was to introduce teachers to topics such as agriculture, species at risk and climate change as well as allow them time to network with experts and volunteers in environmental and agricultural organizations.

We wrapped up this project with an online survey to both teachers and networkers. This allowed us to get an understanding of what took place in the months following the workshop as well as gain insight about how this workshop could be improved and what participants' needs are for the future.

### **RESULTS**

The teacher response to the workshop flyer was immediate. The workshop registration was full by the end of June with minimal advertising. Twenty seven teachers from Bluewater District School Board, Avon Maitland District School Board and Huron Perth Catholic District School Board registered for the workshop. Two of the teachers were school board administrators and did not require supply.

Table 1: Schools represented at the Lake Huron Environmental Teacher's Workshop 2010

FE Madill	Mitchell D.H.S.	Saugeen District Secondary School
Central Huron Secondary School	Listowel D. S. S.	Kincardine District Secondary School
Goderich District Collegiate Institute	Stratford Northwestern	Walkerton D.S.S.
South Huron D.H.S.	BPDS/PSDS	Kinghurst C.S.
Institute for Outdoor Education (BDSB)	G.C. Huston	St. Anne's CSS

A total of 27 networkers also attended the event. Organizations represented at the workshop were:

Ausable Bayfield Conservation Authority Bluewater Recycling Association

Georgian Bay Biosphere Reserve

Mational Farmer's Union

Maitland Valley Conservation Authority

Pinery Provincial Park

Lake Huron Centre for Coastal Conservation

Hensall District Coop

OMAFRA Huron Geosciences

Saugeen Conservation Authority Huron County Sustainability Plan

Friends of the Bayfield River Bayfield Tree Inventory and Renewal Project

Friends of Hullett Miller's Barn

Huron Stewardhsip Council Canadian Organic Growers

**Huron County Planning** 

Jacqui Laporte (OMAFRA) provided workshop development input as well as OMAFRA Best Management Practices (BMP) informational resources for the teachers. Mari Veliz (ABCA) invited and coordinated the key speakers and networkers (see Appendix 1, agenda). She coordinated food arrangements with Kathy Douglas, a local food advocate who very successfully prepared the meals for the 2009 youth summit. Kathy Douglas prepared a lunch for the day using locally grown foods with the help of four local high school boys helped her prepare lunch and snacks. Jenni Boles (ABCA) coordinated teacher registrations, arranged venue, created an informational calendar (see sample calendar page Appendix 2) the teachers and networkers and compiled lesson plans for the teachers' flash drives.

At the end of the workshop, teachers received a tote filled with OMAFRA BMP informational resources, a calendar of local events and information related to local environmental issues, the Canadian Framework for Community Action brochure, and a flash drive with secondary lesson plans and networker contact information (See Appendix 4).

The networkers at the workshop were provided with display space and interacted with the teachers to provide information relevant to their organizations. They received a calendar at the end of the workshop along with contact information of the teachers who attended that day (teachers signed an information release form at the beginning of the workshop).

Teachers were receptive to the suggestion of receiving regular updates from organizations such as OMAFRA and conservation authorities regarding educational opportunities and maps and data for classroom use. In the days and months following the workshop, teachers and networkers were provided with follow-up information. This included pdfs of the presentations, summaries of group discussions, and funding opportunities for school projects. Their flash drives contained information about the networkers and the resources that those networkers would be willing to provide (i.e., real data on local climate change).

### **FEEDBACK**

Teachers and networkers provided very positive verbal feedback throughout the day. There was a high level of positive energy at the event. OMAFRA compiled the written evaluations from the workshop teachers (Appendix 3, 4). Evaluations showed that people appreciated the food and the overall organization of the event. Although a few found the speed networking to be uncomfortable and a bit rushed, the majority found it to be a very useful, positive experience. Presentations were also well received although some care will need to be taken in the future to make the agricultural/economic talk more relevant to a secondary teacher.

Table 2. Average Scores From Workshop Evaluation (see Appendix 4 for comments)

Catergory	Average Score (out of 5)
Food	4.8
Staff	4.8
Timing	4.1
Agriculture Talk	3.7
Species at Risk Talk	4.9
Climate Change Talk	4.7
Discussions	3.4
Speed Networking	3.9
Overall Satisfaction	4.4

An online follow-up survey was sent to teachers and networkers in February, 2011 (See Appendies 5-8). Fourteen teachers and seven networkers responded and the results give us an idea of what occurred in classrooms and organizations during the months following the workshop.

Teachers expressed interest in attending future teacher workshops such as this. Responses indicated that teachers would be willing to attend the workshop regardless of whether or not supply costs were covered. However, only half were willing to attend a workshop on the weekend. Although a couple of teachers indicated that they would appreciate a webinar series, 80% of our teachers surveyed said that they are not yet comfortable with webinars and prefer face-to-face networking.

The networking was the critical component of this workshop according to both teachers and networkers. Although there is disagreement about whether or not the 'speed networking' and discussion times the most effective networking tool, everyone agreed that giving teachers an opportunity to meet and speak with agricultural and environmental organizations throughout the southeast shore watershed of Lake Huron was a valuable experience.

Networkers indicated that a bit more effort needs to be put into the 'matching' of networkers and teachers to optimize the value of the workshop for them. Many networkers were able to connect with teachers following the workshop by providing resources, class time or field trips. Some said that they made specific changes to their programming to better accommodate teachers' needs. We need to ensure that the workshop is meeting networkers' needs in order to ensure that they will be willing to

participate. Providing them with the time and space necessary to convey their messaging as well as meet with other networkers at the workshop will go a long ways towards making this day as rewarding for them as it was for the teachers.

#### **NEXT STEPS**

An annual workshop would allow teachers and networkers to continue to forge strong working relationships that will continue long after the workshop is over. Networkers could be asked to organize a few projects throughout the year to advertise/present at the workshop. These can be projects that need the help of a few student volunteers or an entire classroom (i.e., tree planting or shoreline cleanups). The teachers would be able to speak with the networkers at the workshop about these projects and then return to their schools with a tangible plan in place. Teachers would receive their education day while still having something concrete to bring back to their students. As relationships strengthen, these projects have the potential to become yearly 'traditions' at the schools and something that students look forward to each year.

Another step would be to hold these workshops on scheduled PA days. (Teacher supply costs were a significant portion of the 2010 budget – Appendix 9). There was a lack of attendance by teachers south of Exeter. A solution to this would be to hold two different workshops- one in Goderich or Kincardine and one in Port Franks or Parkhill to accommodate teachers travelling from the south. This would also allow for organizers to provide teachers with more information specific to their region/county. Several teachers felt that they lacked information relevant to either Bruce or Perth counties. A potential budget to deliver two workshops in the future is found in Appendix 10.

Changes to the workshop would include an agricultural talk that is more focused to teachers' needs, more care being taken to provide facilitated discussions, and tweaking the agenda to provide better timing for the speed networking. It worked well to have the local agency make the arrangements for the workshop. This was true for the 2009 Youth Summit as well. It would be our recommendation that future events for teachers or students have the logistical details handled by local agencies. Many CAs have the education departments that would have the capacity to help host future workshops.

Also, a conversation with each school board would be necessary to determine what the timing would be for the workshop and whether this could be used for a PA day activity. Although a series of webinars could reach more teachers and eliminate teacher travel, it would not allow for the key networking that occurs at a workshop. One of the goals of the workshop is to introduce dialogue among the teachers and agricultural and environmental organizations in their area. This needs to be done face-to-face. More organization could allow for better carpooling options as well as "introducing" networkers and teachers prior to the workshop via email so that they could carpool together and get more one-on-on time.

Teachers are looking for tangible projects and activities for their students, and the ultimate goal of this workshop is to reach out to youth and engage them in community

actions. This was the primary purpose of the youth summits from 2007-2009 and we have not lost sight of that focus. We have been able to maintain stronger communication with teachers following the workshop than we were able to have with youth after a youth summit. Teachers are our link to students. Forging strong relationships among teachers and networkers creates our best opportunity to reach the youth that we are trying to engage.

"[The workshop provided me with] an awareness of what organizations exist and what they are doing."

Workshop Teacher via online survey

"[Since the workshop, my class has studied/discussed] local species and their environments and environmenta lpractices put in place by local farmers and conservation groups regarding naturalizing and protecting ecosystems."

- Workshop Teacher via online survey

"What a great day. You should be in charge of all teacher work shops! Never in 32 years in the classroom have I seen or experienced such an organized and meaningful PD type day. Well done Mari (and company)!"

- Workshop Networker via email

### APPENDIX 1 2010 Workshop Agenda

8:45	Registration							
9:00	Introduction – Jim Ginn (Purpose of the day)							
9:15	Frank Backx (Overview of how our landscape is predominately used)							
9:35	Questions							
9:45	BREAK							
10:00	Alistair MacKenzie – Local Species at Risk							
10:30	Discussion - How can you bring this information into your classroom?  What community actions can happen outside of your classroom? What do you need to have more practical experiences for your classroom?							
11:00	Speed Meetings with networkers and teachers – three minute 'sessions' with each person							
12:15	LUNCH							
1:00	Kathy Douglas –local food							
1:15	Brian Luinstra – Local Climate Change							
1:45	Discussion - How can you bring this information into your classroom?  What community actions can happen outside of your classroom? What do you need to have more practical experiences for your classroom?							
2:15	Wrap-up – Mari Veliz (getting local youth involved) and Jenni Boles (what is on the flash drives)							
2:30	Evaluations and End							

### APPENDIX 2 Sample Calendar Page



Septe	ember	2010	<b>Reminder</b> -S Check out helpful	Start reducing yi l <b>Eco School</b> info	our school's eco fo rmation at ontari	otprint today! ioecoschools.org.
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	PA (All DSB) 2	3	4
5	6 Labour Day	7	8	9	10	Lambton Shores Youth Expo
12	13	Lake Huron Environmental Secondary Teachers' Workshop	ABCA Fall Tree Order Deadline aboa.or.ca	16 World Ozone Day uneptie.org/ozonaction	17	18 Shoreline Clean-up Sept. 18 – 26 shorelinecleanup.ca World Water Monitoring Day vorldwatermonitoringday.org
19 Canadian Forestry Week canadianforestry.com	20	21	22 Conservation Strategy Development Team Mtg Youth Welcome! aboa.on.ca Car Free Day worldoarfree net/wcfd/	Autumn Begins	24	25
World Rivers Day worldriversday bot ca	27	28	29	30		

# APPENDIX 3 Evaluation Form

	Needs Improvement		Satisfacto	ry	Excellent	Comments/ Suggestions
Food	1	2	3	4	5	
Staff/ Volunteers	1	2	3	4	5	
Event Timing	1	2	3	4	5	
Frank Backx Presentation	1	2	3	4	5	
Alistair MacKenzie Presentation	1	2	3	4	5	
Brian Luinstra Presentation	1	2	3	4	5	
Discussion Times	1	2	3	4	5	
Speed Networking	1	2	3	4	5	

### <u>APPENDIX 4</u> Evaluation Summary (26 replies)

### FOOD

- **3** 1
- **4** 2
- **5** 23
- Can we have the recipes? (x 2)
- Well done Cathy and boys!
- Fantastic! Thanks! (x 2)
- THANK YOU (a highlight)
- Amazing!
- Totally awesome!!
- Great to see students involved
- Great job!
- Great to have Kathy cook and chat

### STAFF/VOLUNTEERS

- **4** 5
- **5** 21
- Friendly and helpful
- Thanks so much everyone!
- Thank you for your hospitality

### **EVENT TIMING**

- **2** 1
- **3** 3
- **4** 9
- **5** 12
- Good
- Need to keep questions and answers on track
- Didn't get to meet with all people in speed meeting
- Could have run a bit longer one more speaker?
- Thanks for making me sign up in June wouldn't have made it otherwise

- A little closer to beginning of year
- Mari and Jenni did a good job of keeping us moving
- More networking time needed
- Fine it worked

#### Agriculture

- 1 1
- **2** 3
- **3** 8
- **4** 4
- **5** 10
- Information heavy with little help towards application
- Not relative
- Very informative! (x 2)
- A good basis for day but tough to understand some terminology
- Excellent/pushing an agenda?
- Addressing the dollar side would be great for math
- Relevant information good to see this connection being made
- More env focus
- Lots of information and I feel would be of great interest to students

#### Species at Risk

- **4** 2
- **5** 24
- One day late introduced biodiversity yesterday
- Exactly what I was looking for
- You made me want to know more and am excited to talk to my students
- Loved the local information
- Great info
- Engaging speaker still info heavy

### Local Climate Change

- **3** 1
- **4** 6
- **5** 19
- Great perspective
- You keep it real, local and interesting
- Exactly what I was looking for
- Wonderful
- Most helpful; clear; again one way expert to us; what does teacher do with info?

#### **DISCUSSION TIMES**

- **1** 1
- **3** 9
- **4** 10
- **5** 6
- Some use have a facilitator in each group
- Some people had their own agenda; self promo, not discussion
- Good
- Perhaps let us self select based on topics
- Second full member group was great; first small groups not so much! (x 2)
- Didn't take a lot away from the discussion
- Breaking into different separate breakout groups would allow for increased networking

#### SPEED NETWORKING

- **2** 3
- **3** 2
- **4** 12
- **5** 9
- Repetitive for presenters; instead do small group presentations/discussions; summarized to whole group or notes given
- More time needed (x 2)
- Excellent!
- Great idea
- Rushed
- Cool idea a bit rushed, but very good to make those personal contacts
- Prefer to wander to interested groups, however, useful contacts made; uncomfortable at times
- Thanks for the inf now to go through it all
- Very useful
- Give a little more time (maybe 5 mintues)
- Novel idea very cool and valuable
- A bit too speedy but very worthwhile; trying to remember all the amazing possibilities
- Bottle necking was a problem (going longer than time); bell needed to be louder but GREAT idea

### **OVERALL SATISFACTION**

- **3** 1
- **4** 12

#### **5** – 13

- Useful in many ways
- Thank you! Excellent day! (x 2)
- Really great and informative!
- Wow, what an amazing day!

#### COMMENTS AND SUGGESTIONS

- Thanks, very worthwhile, interesting day
- I thoroughly enjoyed today. It was wonderful to make contacts with various local people. I am definitely getting people to visit my classroom. Well organized too!
- It was a great day! Thanks for all the information and resources. Great discussions and I really enjoyed the networking. I definitely met people in our community who can help us with our environmental initiatives at our school
- Thanks so much for putting all of this together for today. Well done!
- Next time First Nation input/representatives
- Allow second time for more detailed conversation with "top 3" of the networkers we met first time around in small groups 10 minutes per visit?
- Speed networking was awesome learned lots and met lots of interesting people
- Awesome you guys are doing this!
- The Huron-centric focus was a little less relevant and useful for teachers from Grey & Bruce, but the info was still great!
- I loved the lunch and having the chef speak about her philosophy afterward
- Awesomely organized and executed. I'm totally pumped!
- Thank you for a great day
- Very informative! Great snacks and lunch! Fantastic diversity. Great presenters! Amazing flash drive.
- I really enjoyed the workshop. I would have enjoyed even more presentations from speakers. I would probably do away with the first group discussion and move it to the end. All in all it was a wonderful day and it was really useful. Thank you for your time and energy!
- Will you do this again? I would love to do this again! The resources and experiences are appreciated.
- Thank you for organizing this day. If you need future ideas, I'd love to learn more about what is happening in the lakes. There are a lot of changing species in the Great Lakes that I don't even know about. Overall, a very useful and enjoyable start to my school year.
- Thanks! I look forward to next year!
- How can we get one on one time to sit down and plan with these local resources?
- Thank you so much for organizing such a valuable PD opportunity
- One important stakeholder administration. Is there something that can be done to have administrators make outdoor and taking class outside more of a priority by providing more time for teachers and students to leave site?

- I am very pleased to have attended this workshop I have met several people who I will contact over time as well as I have LEARNED a great deal of info as it relates to our local environment.
- Please advise of any similar info sessions as they occur
- Great take aways you're looking after your teachers

### APPENDIX 5 – Online Teacher Follow-up Survey

Laka Ulusan Engis						
Lake Huron Envir	ironmental Tead	chers' Workshop	Follow-up Su	rvev	5. Have you incorporated more lessons/dialogue focused on Lake Huron agricultural or	10. How many of the BMP information resources did you use in your classroom?
					environmental concerns into your classroom or school based on what you learned at the workshop?	○ None
					Yes	O 1-3
		few questions about the September 14, 2010. T			□No	○ 4 - 6 ○
minutes and it will g	greatly help the work	shop organizers better	understand your n	eeds for possible		○ 7 - 10
		ite an awareness and e tural professionals/volu			If yes, please specify:	O 11-14
	you in advance for yo					O 15 - 18
1. Where do you t	teach?					11. Which BMP information resources were most helpful/relevant for your classroom?
		_			Lesson Plans and Best Management Practices (BMP) Information Resources	[A
		₩.			You received a flash drive of lesson plans as well as a series of Best Mangement Practices	v v
2. Which grades/s	/subjects do you te	ach?			(BMP) information resources at the workshop. Please answer a few questions about these	12. Have you shared any of the BMP information resources with other teachers?
		A			resources.	Yes
		77			6. Roughly, how many of the lesson plans have you used in your classroom?	□ No
		have about environm			○ None	If so, how many?
the Lake Huron s	southeast shore wa	itershed prior to atter	nding the worksh	nop? I could have	○ 1-3	
	No knowledge	Some knowledd		been a	O 4-6	13. Did you contact OMAFRA for more copies of BMP information resources?
Land-Lake	0	O O		presenter	○ 7 - 10	○ Yes
Connections			0	0	○ 11+	○ No
Agricultural Activities	0	0 0	0	0	7. Were the lesson plans organized in a way that saved you time?	
Species at Risk	0	0 0	0	0	○ Yes	14. What other types of resources should be provided?
Local Climate Change Effects	Ŏ	0 0	Ō	Ō	○ No	
Local Food	0	0 0	0	0	8. Have you shared the lesson plans with other teachers?	▼
Initiatives	Ŭ				Yes	Lake Huron Watershed Networkers
4. What was the n away from the wo		icultural or environm	ental concept the	at you took	□No	Twenty-seven agricultural and environmental organizations from the Lake Huron southeast shore
away ironi tile wo	orkshop:					watershed attended the workshop. One of the unique components of the workshop was the
					If so, how many?	'matching' of these networkers with teachers. The following questions are related to the presenters and other professionals/volunteers that you may have met that day.
					9. Please list other types of lesson plans that would be helpful to you.	15. Prior to attending the workshop, how many networkers were you aware had
					5. Flease list other types of lesson plans that would be neighbor to you.	resources that could help you as a teacher?
1				ı		
		ess of environmental		lorganizations	19. Would you recommend this type of workshop to another teacher?	25. Please select the topics that you would like to see featured at a workshop or webinar focused on the Lake Huron southeast shore watershed.
	Huron watershed p	rior to attending the	workshop?		Yes	
Unaware					○ No	Balancing farming practices and water quality
Somewhat aw	ware				20. If supply money were unavailable, would you still make an effort to attend this type	The value of wetlands in a watershed
Had previously	ly been in contact wit	th a networker from the	workshop		of workshop?	The role of trees in a healthy watershed
A networker from	from the workshop ha	ad presented to my clas	ss in the past		Yes	Limiting erosion
Have previous	sly attended a field tr	rip at a networker's loc	ation		○ No	Keeping wells safe and clean
Other (please	e specify)				21. Would you be willing to attend this type of workshop on a weekend?	Cottage life and water quality
					Yes	Buffer Strips along streams and farmland
17. Did you conne	nect with any of the	networkers after the	e workshop?		○ No	Greenhouse gases and livestock production
( ) Yes	,				22. How far would you be willing to travel to attend a workshop focused on agricultural	
						Fish and wildlife habitat management
○ No					and environmental topics related to the Lake Huron southeast shore watershed?	☐ Invasive Species
○ No	the exacts to the same					Invasive Species Species at Risk
_	the people/organizat				and environmental topics related to the Lake Huron southeast shore watershed?	☐ Invasive Species
_	the people/organizat	ions you spoke with			and environmental topics related to the Lake Huron southeast shore watershed? (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)	Invasive Species Species at Risk
_	the people/organizat				and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?	☐ Invasive Species ☐ Species at Risk ☐ Climate Change
If yes, please list th			ou?		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes	☐ Invasive Species ☐ Species at Risk ☐ Climate Change ☐ Local food initiatives
If yes, please list the	city were the netwo	<u> </u>		nding regions	and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No	☐ Invasive Species ☐ Species at Risk ☐ Climate Change ☐ Local food initiatives ☐ Creating youth initiatives in your community
If yes, please list the state of the state o	city were the netwo	orkers able to help ye	on and its surrour		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
If yes, please list the second of the second	city were the netwo	orkers able to help you particular to Lake Hur t a specific subject rela	on and its surrour		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
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If yes, please list the state of the state o	city were the netwo classroom resources her information abou a field trip at their loc in our classroom abo	porkers able to help you particular to Lake Hur t a specific subject relation	on and its surrour		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No  Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
If yes, please list the state of the state o	city were the netwo classroom resources her information abou a field trip at their loc in our classroom about e specify)	privers able to help you particular to Lake Hur t a specific subject relation	on and its surrour sted to this region shed topic		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No  Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
If yes, please list the state of the state o	city were the netwo classroom resources her information abou a field trip at their loc in our classroom about e specify)	privers able to help you particular to Lake Hur t a specific subject relation	on and its surrour sted to this region shed topic		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No  Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning  unch	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
18. In what capac  By providing of By providing a By providing a By providing a Cother (please	city were the netwo	privers able to help you particular to Lake Hur t a specific subject relation	on and its surrour  Ited to this region  Ished topic		and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning  unch  after school	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
If yes, please list the second of the second	city were the netwo classroom resources her information abou a field trip at their loc in our classroom abo e specify) es in Lake Huron's S anding the southeast s we balance these imp	pricers able to help you particular to Lake Hur ta specific subject relation but a Lake Huron water outheast Shore Water	on and its surrour sted to this region shed topic shed an area rich in ag	riculture and	and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No  Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning  lunch after school evening	Invasive Species Species at Risk Climate Change Local food initiatives Creating youth initiatives in your community Other (please specify)
If yes, please list the second of the second	city were the netwood classroom resources her information about a field trip at their loc in our classroom about especify)  es in Lake Huron's S anding the southeast see balance these imper?	privers able to help your particular to Lake Hurt to specific subject relevantion and a Lake Huron water outheast Shore Water shore of Lake Huron is cortant ecomomic feature.	on and its surrour sted to this region shed topic shed an area rich in ag res with the envir	riculture and onmental concerns	and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning  unch  after school	☐ Invasive Species ☐ Species at Risk ☐ Climate Change ☐ Local food initiatives ☐ Creating youth initiatives in your community ☐ Other (please specify)  26. Please provide any other feedback about the workshop that could help the
If yes, please list the state of the state o	city were the netwood classroom resources her information about a field trip at their loc in our classroom about specify)  es in Lake Huron's Studing the southeast stee balance these imp?	pricers able to help you particular to Lake Hur t a specific subject relation out a Lake Huron water outheast Shore Water shore of Lake Huron is	on and its surrour ted to this region shed topic shed an area rich in ag res with the enviro	riculture and onmental concerns future venues and	and environmental topics related to the Lake Huron southeast shore watershed?  (answer can be given in time or distance - PLEASE NOTE YOUR STARTING LOCATION)  23. Would you be interested in a webinar series rather than a workshop?  Yes  No  Please specify your reason for or against a webinar series.  24. If we were to offer a webinar series, what timing would be best for you? (free free to check more than 1 box)  morning  lunch after school evening	☐ Invasive Species ☐ Species at Risk ☐ Climate Change ☐ Local food initiatives ☐ Creating youth initiatives in your community ☐ Other (please specify)  26. Please provide any other feedback about the workshop that could help the

# APPENDIX 6 Online Teacher Survey Summary (14 replies)

1. Schools Represented in Survey

Mitchell District High school Outdoor Education centre, Wiarton

Walkerton District Secondary School Northwestern Stratford

Goderich South Huron District High School

BPDS/PSDS Chesley

Kincardine District Secondary School Central Huron S. S.

### 2. Grade Level and Subjects Taught

<u>6</u>

7/8 – Science, Art

- <u>9</u> Canadian and World Studies, English, Geography, Guidance, Math, Science, Technology (Green Industries),
- 10 Canadian and World Studies, English, Guidance, Math, Science, Technology (Green Industries),
- 11 Biology, Canadian and World Studies, Chemistry, Environmental Science, Guidance, Math, Science, Technology (Green Industries)
- 12 Biology, Canadian and World Studies, Chemistry, English, Environment and Resource Management (CGR 4M), Guidance, Math, Science, Technology (Green Industries),

Special Education

3. Level of knowledge about environmental and agricultural issues in the Lake Huron southeast

shore watershed prior to attending the workshop? (14 Replies):

	No Knowledge (1)	(2)	Some Knowledge (3)	(4)	Extensive Knowledge (5)
Land-Lake Connections			9	4	
Agricultural Activities	3	2	5	4	
Species at Risk		5	5	4	
Local Climate Change Effects		7	6	1	
Local Food Initiatives		1	4		1

### 4. The most important agricultural or environmental concept taken from the workshop (13 Replies):

- the huge economic benefit and the steps towards sustainable agriculture environmental all of the opportunities provided by our local conservation authorities and other organizations
- Networking with others, informative presentations
- Temperature patterns resulting from climate change night-time lows are increasing precipitation patterns are changing and runoff is endangering slopes and shorelines
- Effects of climate change on local areas
- Local climate data and how it relates to climate change
- I enjoyed hearing the hydrologist speak, specifically about the local effects of climate change.
- That our average daily low temperatures have risen
- Local Climate change impacts
- The workshop was a while ago, now, but I think Mr. Luinstra stressing how one can make global warming a "local issue" by looking at local climate data. Also, the Hensall Coop rep

was very informative, as well. Good overall picture of where ag. is at, at the moment, and trends for the future.

- Not one in particular as most of the information was new and helpful but as I am initiating a correct waste management program here at the Centre so talking and gathering information from the displays was very helpful.
- The local impact of climate change around the Great Lakes.
- Inter-connectedness between rural areas and lakes...how climate change will affect the area...
- Just an awareness of what organizations exist and what they are doing.
- I don't know that I could narrow it down, the species at risk was wonderful
- I can't remember now. This survey should have been sent out in the fall shortly after the workshop had been presented not 6 months later.

5. Have you incorporated more lessons/dialogue focused on Lake Huron agricultural or environmental concerns into your classroom or school based on what you learned at the workshop? (14 Replies)

Yes - 12

No-2

- focus on local stream/pond study; inclusion of issues affecting L. Huron especially with endangered, invasive species (note environmental science is 2nd semester and I will definately be including more of a local flavour this time around)
- This is very dependent on what courses you are teaching. Next year I will be teaching a senior Environment course CGR4M and will use more material then. Some information was useful in my teaching of Grade 9 geography.
- Source Water Protection information Species at Risk Local food initiatives
- local climatic effects -agricultural statistics
- Summarized many of the things I learned ...
- Local species and their environments. Environmental practices put in place by local farmers and conservation groups regarding naturalizing and protecting ecosystems.
- Yes and no, I used some information in my ecology lessons in intermediate science. I'm just starting the CGR 4M curriculum in Wiarton and will use more in depth info in this course.
- Waste management
- I have used the species at risk slide show.
- Summaries of what was discussed /learned
- I have been trying to bring a more local focus in the examples I use.
- continue with the dialogue about local climate changes seen through young people's eyes . species at risk is ongoing
- statistics and examples of species at risk in Lake Huron

6. Estimated number of lesson plans used in the classroom (10 Replies)

None – 5

1 to 3 - 6

7. Were lesson plans organized in a way that saved time? (8 replies)

Yes - 7

No – 1

8. Have you shared lesson plans with other teachers? (11 replies)

Yes - 7

No - 5

15 other teachers received lesson plans from workshop attendees.

### 9. Other types of resources that would be helpful to receive? (2 replies)

- I did not take away specific lesson plans....but the information has informed my teaching.
- Comparing data ie. Perth vs Huron-agriculture stats. Field data collection lessons/methods

### 10. How many of the BMP information resources did you use in your classroom? (10 replies)

None - 4

1 to 3 - 6

### 11. Which BMP information resources were most helpful/relevant for your classroom? (5 replies)

- this will be incorporated in environmental science and I am not at that point yet
- BWb353 (x5)
- -those relating to agriculture and conservation initiatives
- Water management, Beach and Dune kit., forestry wind breaks, Some of the books, will be
  passed onto the horticulture teachers. Some of the OMAFRA books were not useful-dead
  stock removal?

### 12. Have you shared BMP information resources with other teachers? (11 replies)

Yes - 5

No - 6

10 other teachers received BMPs.

### 13. Did you contact OMAFRA for more copies of BMP information resources? (10 replies)

Yes - 0

No - 10

### 14. What other types of resources should be provided? (4 replies)

- I still have the resources I received last year from OMAFRA
- lesson plans, student-friendly materials
- slideshows -weblinks
- Include Perth into statistical data.

# 15. Prior to attending the workshop, how many networkers were you aware had resources that could help you as a teacher? (10 replies)

None - 1

Two - 1

Three to Four - 3

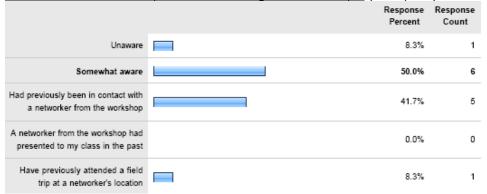
Four to Five - 1

Five to Seven - 1

Fifteen - 2

Lots - 1

### 16. What was your level of awareness of environmental and agricultural organizations within the Lake Huron watershed prior to attending the workshop? (11 replies)



### 17. Did you connect with networkers following the workshop? (12 replies)

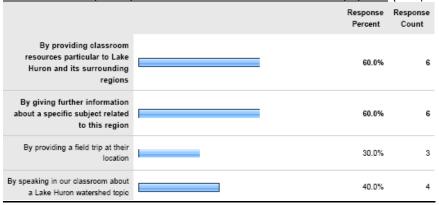
Yes - 6

No - 6

Specifically:

- BRA ABCA farm plan OMAFRA
- Jaquie Laporte OMAFRA
- field trip to Hullett and Wawanosh
- Frank Backxx, Hensall District Co-op
- Saugeen Valley Conservation
- I had a visit from Hullet officers who gave a great presentation to my class

### 18. In what capa<u>city were the networkers able to help you?</u> (9 replies)



### 19. Would you recommend this type of workshop to another teacher? (12 replies)

Yes - 12

No - 0

### 20. If supply money were unavailable, would you still attend this type of workshop? (12 replies)

Yes - 12

No - 0

### 21. Would you be willing to attend this type of workshop on a weekend? (12 Replies)

Yes - 5

No - 7

# 22. How far would you be willing to travel to attend a workshop focused on agricultural and environmental topics related to the Lake Huron southeast shore watershed? (11 Replies)

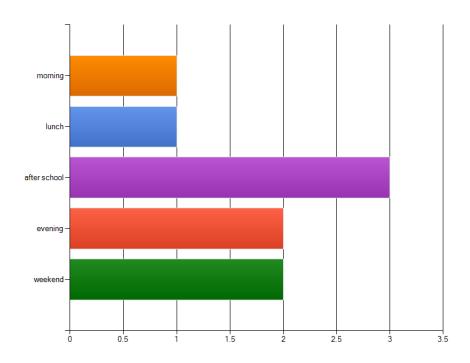
- 1.5 hours
- one hour
- two hours
- about one hour to one and a half hours from Goderich
- 1 hour from Goderich
- Kincardine to Exeter
- Kitchener, to Goderich- workshop would have to be outside and interactive/ hands on activities that could be transferred into the classroom.
- 100-150 km Stratford
- 1 hour from exeter
- depends on the topic -probably an hour
- 30 minute drive from Goderich

### 23. Would you be interested in a webinar series rather than a workshop? (12 Replies)

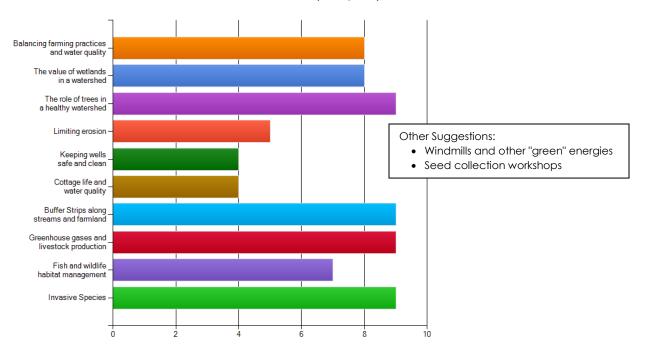
Yes – 2 No – 10

- They're boring. It's better to have face to face contact.
- I have been invited to webinars before and I am not comfortable with them (yet). I find it so useful to have the chance to chat with teachers from other schools as a great way of sharing best practices.
- I prefer to meet and discuss in person.
- environmentally friendly idea -allows us to choose the time that suits us to listen to the seminar
- Not having to drive
- I teach teenagers, sometimes ten other times 20-30 at a time, I have to interact with them, I don't set them in front of a computer screen. When I know the class has lost interest in a activity I change the way I present the information with a webinar presentation you canot see the change in emotions. I visit conservation areas/ parks I don't go and interact with a computer screen. I have experienced some web based presentations/ one benefit; If I think is if the presenter is a poor one I shut the screen off.
- I am unfamilliar with the webinar concept and how it works. I like the atmosphere of a workshop.
- I really prefer making the one to one connections and having dialogue
- I don't have time to sit in front of the computer during my regular teaching day. My preference is to be in the same room as the presenter

### 24. If we were to offer a webinar series, what timing would be best for you? (6 replies)



### 25. Please select the topics that you would like to see featured at a workshop or webinar focused on the Lake Huron southeast shore watershed. (9 Replies)



# 26. Please provide any other feedback about the workshop that could help the organizers plan future activities. (5 Replies)

- It was one of the most valuable workshops that I have attended!
- I teach in Perth County and would like to see more information about issues in this area.
- The workshop was a good one, I think more work could be done to connect youth to organizations outside of school. In High School a student needs 40 hours to graduate, maybe they could volunteer at some of the organizations that presented to gain these. le. windbreak planting, river cleanup. Get more people to car pool to events.
- I would like the work shop to be more interactive and activity based. Let's go to a farm or forest and see management practices, or tour the local landfill or recycling depot. ABC did a bus tour a couple summers ago where we went from place to place looking at issues in the watershed. I want real hands on examples that I can learn from. Honestly paper files get put away and never looked at again. Real experiences are remembered and integrated into practice.
- I loved the circle when we moved around the room and speed talked. do that again , but maybe change the timing
- As a teacher from Bruce County, I felt some of the people and resources were quite "Huron-centric", but overall it was a good day. The overview of agricultural stats was uneccessary.

### APPENDIX 7\_- Online Networker Follow-up Survey

Please take	a few minutes to an	iswer a few questio	ons about the t	teachers' workst	nop that you
attended th workshop o	s fall. The survey sh rganizers know your ationships among te	ould only take 5 mi needs for possible	nutes to comp future events	lete and it will gr . Our goal is to f	reatly help the
	ationships among te ls/volunteers. Thank		nmentai and a	gricultural	
1. Name					
2. Organiz	ation				
			A		
3. Email					
4. What w	s the most import	ant thing that yo	u took away i	from the works	shop?
	make a change in	your programmi	ng based on	what occurred	I at the
workshop		your programmi	ng based on	what occurred	l at the
workshop Yes		your programmi	ng based on	what occurred	I at the
workshop Yes No	?	your programmi	ng based on	what occurred	I at the
workshop Yes No		your programmi	ng based on	what occurred	I at the
workshop Yes No	?	your programmi	ng based on	what occurred	l at the
workshop Yes No	?	your programmi	ng based on	what occurred	I at the
workshop Yes No	?	your programmi	ng based on	what occurred	l at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the
workshop Yes No	?	your programmi	ng based on	what occurred	at the

ke Huron Environmental Teachers' Workshop Networker Survey
10. Would you be interested in participating in a webinar series rather than a workshop
Yes
○ No
Please specify your reason for or against a webinar series.
11. If we were to offer a webinar series, what timing would be best for you?
Morning
Lunch time
After school
Evening
Weekend
12. What environmental or agricultural topic would you like to see covered at a future
workshop or webinar?
13. Would you be willing to be a presenter at a future workshop or webinar?
○ Yes
○ No
If yes, what would be a possible topic?
14. Is there anything that could be done at future workshops to help you make more connections with area teachers?
Connections with a calculations.
45. Disease provide any other feedback about the weekshop that could halp the
15. Please provide any other feedback about the workshop that could help the organizers plan future activities.

prese	e of the unique components of this workshop was the "matching" of local ommental organizations and teachers. The following questions are related to the inters,other professionals/volunteers and teachers that you may have met at the shop.
How	many teachers and networkers did you connect with following the workshop?
0	lone
O 1	-5
O 6	- 10
O 1	0 - 20
O 2	0-30
O 3	0+
7. In	what capacity were you able to assist teachers following the workshop?
1	WA
E	by providing classroom resources
	Siving further information about a particular subject
	eading a field trip at our facility
	peaking in a classroom
	Other (please specify)
work	ould you be willing to provide a specific lesson plan or program discount for futu shop participants? les lo s, please specify
0.141	would like to provide teachers with more networking apportunities in the future
	ewould like to provide teachers with more networking opportunities in the future se help us to determine what types of venues would best fit your needs.

# Appendix 8 Networker follow-up Survey Results (7 Responses)

### 1. Organizations represented in survey:

Huron Perth Farm to Table In the Kitchen

Huron County Planning Department

Bluewater Recycling Association

Friends of Hullett

Lake Huron Centre for Coastal Conservation

Bluewater Recycling Association

Saugeen Conservation / Grey Sauble

Conservation Authority / Bruce Power

### 4. What was the most important thing that you took away from the workshop? (7 replies)

- organizers being fairly unaware of local food initiatives in the region also only conventional ag was part of presentations
- Teachers need support in order to deliver environmental programs (like finding funding and providing programs).
- Networking with the teachers
- Teachers in the area are interested in being linked to local resource people to help them develop environmental educational opportunities for students.
- what is being taught by the teachers and offered by the private sector & enjoyed the Pinery presentation
- The realization that there are some wonderful secondary school teachers who are truly committed to gathering relevant, local information about environmental issues to share with their students.
- a good opportunity to do as the program aspired to network with local secondary school teachers and showcase what programming/resources we have available

### 5. Did you make a change in your programming based on what occurred at the workshop? (7 replies) Yes – 3

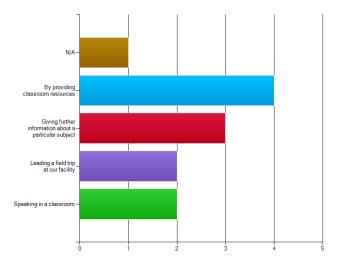
No – 4

- The Maitland Trail Association is organizing a trip to the Morris Tract for grade 12 GDCI students. Sustainable Huron is organizing schoolyard greening projects for three schools in Huron County.
- Made ourselves available to schools for workdays, tours and much more.
- Into at this time
- I will definitely try integrating some of the information we have available regarding climate change into our programming and make it available in a useable format for schools (finding the time is the challenge)

6. How many teachers and networkers did you connect with following the workshop? (7 replies)

None – 1 One to Five – 2 Six to Ten – 3 Ten to Twenty – 1

7. In what capacity were you able to assist teachers following the workshop? (5 replies)



## 8. Would you be willing to provide a specific lesson plan or program discount for future workshop participants? (7 replies)

Yes - 5

No – 2

- local food why, what, where
- Trip to Morris Tract.
- Anything
- We currently have resource packages for teachers related to (1) beach and dune ecosystems, and (2) climate change and the Great Lakes. Resources can be made available free to teachers who request them.
- Outreach programs through Bluewater Recycling are free of charge if the participants are from a member municipality (South Huron, Bluewater, Goderich etc.)
- sorry, our programming is based on a cost-recovery my position is covered mostly through user-fees, with a little help from levy; challenging to make it all work as it is.

#### 9. How far would you be willing to travel to participate in a workshop like this? (7 replies)

- within Huron and/or Perth
- 60 km
- 150 km's
- Within a one hour driving time.
- 30 60 minutes away
- I'd be willing to travel less than an hour or 80 kms one way.
- 45 minutes to an hour works best

### 10. Would you participate in a webinar series rather than a workshop? (7 replies)

Yes - 3

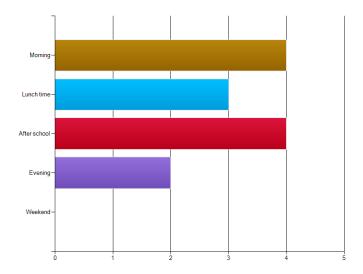
No - 3

- uncertain actually not sure what teacher uptake would be
- I think we need to build relationships first in a face to face setting.
- Not personal
- A guarded yes. A webinar avoids the need for travel and may make the event more accessible for teachers who prefer not to spend time (or cost) on the road. Sends a

positive message to environment teachers that the event is reducing carbon footprints. It doesn't allow for networking however, which is probably the most valuable part of the day.

- I prefer the face to face interaction
- I'd be willing to participate in either a face-to-face/traditional workshop or a webinar.
- possibly, depending on advance notice (at least 2 months) and possible price

#### 11. If we were to offer a webinar series, what timing would be best for you? (6 replies)



### 12. What environmental or agricultural topic would you like to see covered at a future workshop or webinar? (7 replies)

- alternative agriculture, local food system development, food issues
- Hiking (Maitland Trail), tree planting, local food, agriculture and environment, schoolyard
  greening, waste management (school composting and recycling), walk to school. It is also
  important to have youth represented on County committees-- how about asking local
  Councils to have a meeting at the highschool so that students can participate.
- Biodiversity in Ontario
- Climate change, impacts and adaptations at the local level. Anything coastal, obviously!
- local food & sustainablility
- I'd like to see a workshop geared towards some practical tools for dealing with environmental issues, that focuses on the FIRST R...Reduction like waste reduction ie littlerless lunches, energy use reduction ie. carpooling, purchasing practices, water consumption reduction etc.
- This was a great place to start, not sure what other topics to include. Maybe Specialist High Skills Major info?

### 13. Would you be willing to be a presenter at a future workshop or webinar? (7 replies)

Yes - 4

No - 3

- alternative agriculture, agriculture policy, local food systems, organic agriculture, food safety.....
- land use planning
- Great Lakes and climate change; beach ecology
- REDUCTION...and in particular as it relates to waste

### 14. What could help you make more connections with area teachers? (6 replies)

- some kind of directory that includes topic areas/contacts of each networker to be given to teachers and networkers
- More teachers
- Maybe a participants list with email addresses, school, grade level, etc., and conversely, resource peoples contact information. Shared prior to event so people can know ahead of time who they may be meeting.
- perhaps ahead of the workshop, connecting with a teacher who has an interest in my (or anyone else's) topic of interest. that way time isn't lost searching out the right person.
- More time for networking. The speed networking made it hard to really connect and explain to teachers what we do at Bluewater Recycling. Perhaps each networker could make a 5 minute presentation to the whole group rather than saying the same thing a number of times to different individuals.
- Is there an opportunity to allow each organization a chance to showcase so other organizations can see what they have to offer (kind of pre-occupied with teachers, didn't get a chance to get enough of a feel for what others are doing in the field).

#### 15. Further feedback: (7 replies)

- Speed dating needs some facilitation someone paying attention to gaps in the line and taking someone who is presenting to more than one and balancing those participants to someone who is not presenting.
- The last workshop was excellent. I think we could have a workshop like that once a year (perhaps integrated into the PA days). We can learn more about how to work together collaboratively.
- Great Workshop!
- Well laid out. Good job.
- Asking what a participant hopes to gain from this type of workshop? It was a good day and the minister's message about the food was of interest.
- Choice of speakers. One of the speakers, on agriculture in Huron County and area was a
  bit off topic, and had some "interesting" comments about organic farming. I think some of
  his comments were relevant but perhaps there could have been another speaker who
  could balance those comments by providing insight into the benefits of organic farming
  since there are some significant environmental issues related to traditional agricultural
  practices.
- well done, really appreciated the "speed dating" part perhaps offer a little extra time afterward for participants to gather more in-depth info/contact stuff; great idea thank you for the opportunity to participate and provide feedback. Good to see what other organizations etc. have to offer as well. Great day!

# Appendix 9 2010 Workshop Expenses

Item	Cost	Total cost	
Food: coffee, snacks, lunch	\$15*54	\$81	10
Knights of Columbus Catering fee Calendars speaker donations – donations for Ausable, Maitland and Saugeen Valley Conservation	\$4* 54	\$21 \$85	
Foundations	3*\$50	\$15	50
Supply teacher cost – Avon Maitland Bluewater Huron Perth Catholic		\$3332.8 \$120	
School Board flash drives Knights of Columbus –hall	27*\$10	\$25 \$27	
rental wages <b>Total</b>	155*\$30/h	\$27 \$465 \$12,00	50

### Appendix 10

### 2011 Workshop Budget (2 workshops)

Item	Total cost
Food catering	\$2000
Calendars and printouts	\$2000
Flash drives	\$1300
Venue rental	\$700
Wages	\$4000
Total	\$10,000