Manitoba Envirothon

2016-2017 Summary of Activities



"Turtle Mountain Meadows Trail" Lake Udall, International Peace Garden, May 2017

The Manitoba Envirothon is a program of the Manitoba Forestry Association (MFA). In 1996, MFA explored the idea of establishing an Envirothon in Manitoba. Four teams participated in the first Manitoba Envirothon in 1997 at Birds Hill Provincial Park. In 2006, the MFA hosted the North American Canon Envirothon and made Envirothon one of its core programs.

Due to the growing popularity of the Manitoba Envirothon across Manitoba, it evolved into a regional and provincial format in 2010. In 2011, Manitoba represented by a team from Swan River beat 53 other Provincial and State teams and won the North American Envirothon—the first Canadian team ever to do so!

In 2017 as the Manitoba Envirothon celebrated its 21st Anniversary, we are still going strong with over 3,200 students having participated to date!







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OVERVIEW

For the past 20 years the Manitoba Forestry Association (MFA), along with it partners and funders, have been the proud host organization for the Manitoba Envirothon. This program has provided Manitoba's high school aged students a unique and fun way to get outdoors and learn about the environment and its current issues. In 2017, 64 teams Registered to compete at the Regional level, with 58 (from 32 schools) attending and 19 teams (from 16 schools) advancing to the Provincial level. The theme topic for 2017: Agricultural Soil and Water Conservation Stewardship, allowed the students and advisors to explore the roles and responsibilities needed to successfully manage resources and situations related to each core topic. Learning centered on "beneficial management practices (BMP's)" and the importance of multi-disciplinary collaboration to hopefully mitigate the negative consequences of land management practices and their effects "downstream"!

There were five Regional Envirothon competitions that were held throughout the province during the weeks of April 18 to 26, 2017. The MFA partnered with the following Regional Host organizations: Frontier School Division (University College of the North, The Pas - April 25 & 26), Manitoba Parks and Protected Spaces (Alf Hole, Rennie – April 24), LaSalle Redboine Conservation District (Pinkerton Lake WMA, Treherne – April 19), Oak Hammock Marsh Interpretive Centre (April 20) and the newest member of our "Regional Family" The Riverbank Discovery Centre (Brandon – April 18) to stage events – *almost* all with good weather considering the time of year (sorry about that snow storm Eastern Region)! Continuing the structure fully implemented in 2011, all teams were required to qualify at the Regional level in order to advance to the Provincial Envirothon.

The Provincial Envirothon took place at the International Peace Garden (IPG), Boissevain from May 25-27, 2017 – our fifth time at that fine facility! The teams were housed and fed at this unique camp. The event was kicked off by words of welcome from Garry Enns, CEO of the IPG followed by Dave Wotton, President of the Manitoba Forestry Association, finished off by the creative and memorable Team Introductions! Friday, the field test took place around Lake Udall and the International Game Warden's Museum on the hill and creeks of the "Turtle Mountain Meadows Trail". It consisted of 15 stops with typically two teams per stop, and it took place under cool and cloudy conditions, but not enough to dampen spirits!

Our events are now being led off with an Acknowledgement of Territory statement provided by The Treaty Relations Commission of Manitoba and Frontier School Division Staff. Specific Statements have been developed for each of our Regional and Provincial event locations and will be substituted as the events move from year to year. For 2017 provincials:

"The Manitoba Envirothon and the Manitoba Forestry Association would like to acknowledge that this event at the International Peace Garden is located in Treaty Two territory, the traditional lands of the Ojibway, Cree, and Dakota peoples, and the homeland of the Metis."

The Saturday orals competition was held in the Rindt Hall and Burdick Centre at IPG. Orals prep was done all in advance with the students for the first time allowed to create and bring with them a digital (without audio or web access) presentation if they so choose or they could of course use a poster as at Regionals.

All reference material was required to be cited as well as a Statement of Authorship. (Please see Appendix C). We feel these changes will better prepare the students for the current challenges, standards and technology available to help them! Once the scores from the field test and the oral competition were tallied the winning team was another first time winner (continuing a three year trend); **Westwood Collegiate**, Winnipeg Manitoba. Congratulations! The team then attended the North America Envirothon in late July at Mount St. Mary's University, Emmitsburg, Maryland! Please see Page 16 for their story.

Participants experience hands-on learning opportunities and possibly begin careers as resource managers, scientists or empowered citizens and future leaders! There will again be the ongoing reviews of the program - incorporating feedback we get from the event participants – students, advisors, volunteers and partners, to ensure that the MFA is providing the best Envirothon experience!

The MB Envirothon Steering Committee would also like to announce that **Kadeyn Labossiere** of Prairie Mountain High School, Somerset has been awarded the second *Jim Potton Environmental Responsibilities Scholarship*, to continue his education. Good luck!

Thanks to Larry de March, Byrnes Benoit and all the other photographers!

2017 Manitoba Envirothon REGIONALS



EVENT DETAILS:

NORTH REGION:

Location—University College of the North, The

Co-Host - Frontier School Division Date-April 25 & 26, 2017

EAST REGION

Location—Alf Hole Visitor Centre, Rennie Co-Host — Manitoba Parks and Natural Areas

Date-April 24, 2017

SOUTHWEST REGION

Location—Pinkerton Lakes, Treherne Co-Host —LaSalle Redboine Conservation District Date—April 19, 2017

WINNIPEG REGION:

Location—Oak Hammock Marsh, Stonewall Co-Host —Oak Hammock Marsh Interp. Centre Date-April 20, 2017

WEST REGION:

Location—Riverbank Discovery Centre, Brandon Co-Host —Riverbank Discovery Centre Date-April 18, 2017

TEAM REGISTRATION: \$100

EXPERIENTIAL, HANDS-ON, OUTDOOR **ENVIRONMENTAL EDUCATION!**

Looking for a smart way to get outside?

Manitoba Envirothon provides students and teachers a fun, inexpensive, outdoor education experience. At the one day event students will meet experts in the field of environmental management, and gain hands-on experience with the equipment used for environmental monitoring.

Core Topics include: Water & Aquatic Ecosystems, Native Plants & Forestry, Soils & Land Use and Wildlife & Wildlife Management.

The 2017 Theme topic is: Agricultural Soil and Water Conservation Stewardship .

This approach to environmental education helps students develop skills necessary to address environmental issues, such as team work, problemsolving, critical thinking, and public debate!

900 Corydon Avenue, Winnipeg, www.thinktrees.org Manitoba R3M 0Y4 Tel: 204.453.3182, Fax: 204.477.5765 EMAIL: envirocoordinator@thinktrees.org

What teachers are saying about Envirothon:

"Envirothon is the BEST program we participate in for student engagement, citizenship, social justice, environmental awareness, sustainability education!"

"All round value for developing organizational skills. communication and presentation skills, confidence, demonstration and integration of the knowledge gained"

GET INVOLVED!



The Manitoba Forestry Association and the Manitoba Envirothon Steering Committee have a regional qualifying format for the program, where teams are required to qualify at a regional level competition to advance to the provincial level. The advancing structure was set up as follows:

REGIONAL TO PROVINCIAL ADVANCEMENT POLICY

Regional Scoring

Teams competing in Regional Envirothon events will be scored on three components:

- Field Test Core questions supplied by the Manitoba Envirothon Steering Committee (50%)
- Regional Questions provided by the Regional Organization (10%)
- Oral presentation (40%)

The percentages indicated above represent the weighting given in determining a team's final score.

Advancing to the Provincial Event

- Teams qualify for the Provincial Competition based upon their standing in the Regional Competitions. The maximum for the Provincial Competition is 24 Teams.
- Between 12 and 18 of 24 places at the Provincial Competition will be offered to the top Teams competing at each of the Regional Competitions on the basis of their Total Regional Competition Score.
- The total number of places for the top Teams from the Regional Competitions, and the number of Teams from each Regional Competition, will be determined by the Steering Committee annually, based on the number of Regional Competitions and the number of Teams attending each Regional Competition.
- The number of Teams that will qualify from each Regional Competition will be announced once all Teams are assigned to Regional Competitions.
- A minimum of two (2) Teams will qualify from each Regional Competition as Top Teams at that Competition.
- A maximum of two (2) Teams from any particular school will be allowed to qualify for the Provincial Competition as a top Team from a Regional Competition.
- If the Provincial Competition is being held in a location with a participating local school, and no Team from that school qualifies under these rules, the top Team from that school will be offered one of the remaining places at the Provincial Competition as a 'host' school.
- The Teams that have not yet been offered places at the Provincial Competition will be ranked by their score on **only** the **core** Field Test questions written by the Test Writing Committee.
- The remainder of the 24 places at the Provincial Competition will be offered to these Teams in order of their rank as determined above.

Provincial Envirothon Attendance

 Should any of these teams decline their entry offer for the Provincial Envirothon, that position will then go to the team in their region with the next highest combined score and so on until the limit is reached.

THEME GUIDE

For 2017, the Education Committee decided to create our own training information and concentrate on a few specific resources and a Theme Training PowerPoint document. The Theme group revised the NCF Learning Outcomes to make them more "Manitoba\Canada" oriented as the NCF provided resources were US specific.

NEW TRAINING INITIATIVES

Jacqueline Monteith our Northern Coordinator spent significant amounts of time and effort doing outreach to all schools but particularly Northern Schools. She also coordinated the next in our series of LiveStreaming Training events, which was so generously provided by the Frontier School Division. Jennifer Corvino of our Wildlife and Wildlife Management discipline group also worked with a video producer – Victor Chuma to produce a series of YouTube Wildlife videos (to add to our existing suite of previously produced ones). https://www.youtube.com/user/ThinkTreesMFA



Lee does Aquatics LiveStream Training

Frontier School Division Teacher Sessions

14 teachers from across Manitoba and 4 observers attended a day session at Deer Lodge Community Centre in Winnipeg to learn about the program (they had to do a mock field test at the end of the program). 7 schools subsequently entered teams at 2017 events.

Live Streaming Sessions:

First Edition: Feb 5, 2016

As of June 16, 2017:	Soils & Land Use	423 views
	Water & Aquatics Ecosystems	345

Native Plants & Forestry 286
Invasive Species 253
Wildlife & Wild. Management 255

One hour summary session: May 13, 2016

As of June 16, 2017: Summary 165 views

See: http://livestream.com/fsd/envirothon

Second Edition: April 13, 2017

Training provided by members of Mb Envirothon Education Committee All registered teams invited

As of June 16, 2017: Soils & Land Use 109 views

Water & Aquatic Ecosystems 123 Native Plants & Forestry 97

See: https://www.youtube.com/channel/UCIeHQ8nqppvd1WoF8doy3kg

Regionals

North Region: Frontier School Division \ University College of the North \ The Pas

East Region: Manitoba Parks and Protected Spaces \ Alf Hole \ Rennie

South Region: LaSalle Redboine Conservation District \ Pinkerton Lakes WMA \ Treherne

Winnipeg Region: Oak Hammock Marsh Interpretive Centre \ Stonewall

Western Region: Riverbank Discovery Centre \ Brandon



SOIL ANALYSIS AT WINNIPEG REGIONAL at OAK HAMMOCK MARSH



THEME TESTING AT SOUTH REGIONAL at PINKERTON LAKES WMA

The Test Writing Committee prepared a standard test that was made up of core questions that are consistent throughout the regions. Regional hosts are also able to add local questions if they chose, subject to approval from the Test Writing Committee.

For the third time, the Orals component was built into all Regional field tests as a two-stop cluster and then marked by judges. The students were given the Orals question two weeks before the Regional events and expected to develop a poster and presentation, and then answer questions to support their analysis. Throughout the day, host organizations had the ability to showcase their own programs and facilities.



DRUMMING CIRCLE NORTHERN **REGIONAL at UCN THE PAS**



AQUATIC INVERTEBRATE TRAINING AT WEST **REGIONAL at BRANDON**

There were initially 64 registered teams. 58 teams participated in regional events from 32 different schools – all record numbers! Great way to kick off our next 20 years!

New, first-time schools included:

John Taylor Collegiate **Pilot Mound Collegiate**

Rivers Collegiate

Elm Creek School **Maples Met School Warren Collegiate**

William Morton Collegiate Institute



BATTLING THE
ELEMENTS AT THE
EASTERN
REGIONAL
COMPETITION at
ALF HOLE



Regional hosts put on wonderful events. One of the advantages to the regional program is that the host organizations can educate the students on the specific local environment and priority resource management issues.

Participating Schools 2017

There were 64 teams that originally registered for the regional events, however due to a variety of issues, 58 teams representing 32 schools were actually able to compete at the various events.

REGISTERED TEAMS / SCHOOLS (58/32)

Event	School	# Teams	School Division
Northern	Cormorant Lake School	1	Frontier School Division (FSD)
	Margaret Barbour Collegiate Institute	2	Kelsey School Division (KSD)
	Duke of Marlborough	1	FSD
	Swan Valley Regional Secondary School	4	Swan Valley School Division (SVSD)
	R. D. Parker Collegiate	1	Mystery Lake School Division (MLSD)
SouthWest	Carman Collegiate	3	Prairie Rose School Division (PRSD)
	Elm Creek School	2	PRSD
	Nellie McClung Collegiate	2	Prairie Spirit School Division (PSSD)
	Pilot Mound Collegiate	1	PSSD
	Prairie Mountain High School	3	PSSD
	St. Claude School Complex	1	PSSD
	Miami School	2	PRSD
Winnipeg	Elmwood High School	1	Winnipeg School Division (WSD)
wiiiiipcg	Gimli High School	1	Evergreen School Division (ESD)
	John Taylor Collegiate	1	St. James - Assiniboia School Division (SJSD)
	Shaftesbury High School	1	Pembina Trails School Division (PTSD)
	Maples Met School	1	Seven Oaks School Division (SOSD)
	St. James Collegiate Institute	2	SJSD
		1	PTSD
	Fort Richmond Collegiate	2	PTSD
	Vincent Massey Collegiate	3	WSD
	Sisler High School		
	Warren Collegiate	1	Interlake School Division (ISD)
	Westwood Collegiate	1	SJSD
Eastern	Lord Selkirk Regional Comprehensive Secondary School	4	Lord Selkirk School Division (LSSD)
	Gimli High School	1	ESD
	Sturgeon Heights Collegiate	1	SJSD
Western	Brandon Crocus Plains	6	Brandon School Division (BSD)
	Fairholme \ Baker Colony Schools	1	PSSD
	Rivers Collegiate	1	Rolling River School Division (RRSD)
	Grant Park High School	2	WSD
	Virden Collegiate Institute	3	Fort La Bosse School Division (FLBSD)
	William Morton Collegiate Institute	1	Pine Creek School Division (PCSD)
	BOLD = Rookie Teams		
5 Events	32 schools	58	17 Divisions
5 1 t.l	AU-III's AA-Cl C. III - 1's t		acca
Provincial	Nellie McClung Collegiate	1	PSSD
	Westwood Collegiate	1 2	SJSD
	St. James Collegiate Institute	1	SJSD PSSD
	Prairie Mountain High School Cormorant Lake School	1	FSD
		2	
	Grant Park High School Carman Collegiate	1	WSD PRSD
	Shaftesbury High School	1	PTSD
	Gimli High School	1	ESD
	Virden Collegiate Institute	1	FLBSD
	Duke of Marlborough School	1	FSD
	Swan Valley Regional Secondary School	2	SVSD
	Fort Richmond Collegiate	1	PTSD
	R. D. Parker Collegiate	1	MLSD
	Fairholme & Baker Colony Schools	1	PSSD
			. 555
	Lord Selkirk Regional Comprehensive Secondary School	1	LSSD

PLEASE SEE APPENDIX B FOR REGIONAL EVENT SUMMARIES



PROVINCIAL ENVIROTHON

The Provincial Competition was hosted at the International Peace Garden (IPG) from May 25-27, 2017 (our fifth time at this facility) with the field test along the "Turtle Mountain Meadows Trail" around Lake Udall and the International Game Wardens Museum.

Thanks to Larry de March, Byrnes Benoit and all the other photographers!

Throughout the planning of the event the Manitoba Envirothon had tremendous support from IPG Staff – especially Kathy and Garry, the Government of Manitoba and Manitoba Hydro.

Thanks folks!



AQUATICS – FISH IDENTIFICATION





THE SOIL PIT



MULTI-DISCIPLINE QUESTION TEAM WORK

Event topic-training took place inside and on the grounds of IPG. The field test took place among the hill, creeks, sights and sounds of the new "Turtle Mountains Meadows Trail" around Lake Udall and the International Game Warden's Museum. Having open water, native and planted forests, agricultural development, heavy public use and a host of wildlife species within a natural setting allowed for a very topical field test investigating Beneficial Management Practices (BMP's) and their role in Agricultural Soil and Water Conservation Stewardship.

Again in 2017, a single trail was used for field test. Advantages include being able to offer topic training in the morning, and a shorter marking session for the Test Writing Committee, without losing the outdoor or marathon-type nature of the event. This again requires two teams to be at a stop together, but as always; friendship, a common purpose and mutual respect allowed all to compete fairly while having fun!

Our events are now being led off with an **Acknowledgement of Territory** statement provided by The Treaty Relations Commission of Manitoba and Frontier School Division Staff. Specific Statements have been developed for each of our Regional and Provincial event locations and will be substituted as the events move from year to year. For 2017 Provincials (IPG is in Treaty No. 2 area):

"The Manitoba Envirothon and the Manitoba Forestry Association would like to acknowledge that this event at the International Peace Garden is located in Treaty Two territory, the traditional lands of the Ojibway, Cree, and Dakota peoples, and the homeland of the Metis. "

The Saturday orals competition was held in the Rindt Hall and Burdick Centre at IPG. Orals prep was done all in advance with the students for the second time allowed to create and bring with them a digital (without audio or web access) presentation if they so choose or they could of course use a poster as at Regionals. All reference material was required to be cited as well as a Statement of Authorship.

There will again be the ongoing reviews of the 2017 program - incorporating feedback from event participants, volunteers and partners, to ensure that the MFA is providing the best Envirothon program possible. Participants experience hands-on learning opportunities and possibly begin careers as resource managers, scientists or empowered citizens as well as future leaders!

Two additional meeting were held as part of the 2017 Provincial event to get better feedback. First, a meeting was held on the first evening, May 25th after the Team Introductions with all the Teachers\Advisors and the Steering Committee. The meeting was to discuss the **Future Direction of the Manitoba Envirothon** and to raise the topic of the Provincial event being held in Churchill in 2018. A spirited discussion including costs, logistics, team travel, etc. was held. Advisors and Students were once again asked to evaluate our 2017 programs via SurveyMonkey questionnaire.

In addition the Test Writing Committee took advantage of us all being at the IPG to get a "fresh" perspective and hold a discussion on the 2017 test, the new "Interdisciplinary Questions" what worked, what didn't, and based on the *Future Direction* discussion, what we do about a Field Test in Churchill!

Accommodation\Food

Students and advisors were housed at the IPG Music Camp facility. This was our fifth time at IPG. Murray Smith and Linda Christianson also provided meals for the SC and TWC prior to and during the event set up on Wednesday and Thursday. Thanks for the great eats!

Daily Activities

Thursday evening

Once teams had arrived on Thursday and after an evening meal they gathered in the IPG Burdick Centre for the opening ceremonies to the event. Co-chair of the Steering Committee, Byrnes Benoit served as Emcee for the evening. The event was kicked off by words of welcome from Garry Enns, IPG CEO and Dave Wotton, President of the Manitoba Forestry Association, and then the creative and memorable Team Introductions!



Each team was given the opportunity to get up in front of the group to use their imagination and creative spirit to introduce themselves.

Teams performed skits, songs and everything inbetween, to tell the group a little bit about who they are, and where they are from! These introductions also serve to remind everyone of the other talents these students possess. Important event housekeeping and logistical notices were also provided.



Friday

Field Test

The field test took place on the "Turtle Mountain Meadows Trail", investigating Beneficial Management Practices (BMP's) and their role in Agricultural Soil and Water Conservation Stewardship. Please refer to Appendix A to view a map of the 2017 Field Test trail.

Again the field test configuration was a single trail of 15 stops. There were a couple of significant mobility issues for a participant and a volunteer in 2017, but crutches and chauffeurs helped overcome! As in the past, some stops had two teams and were required to share equipment. At the end of the test, teams were allowed an additional 12 minutes to finish up any questions from the field test.

It was a cool and cloudy day and we again had an on-site First Aid person to provide health tips and handle any other issues which arose. Field



PLANT SPECIES IDENTIFICATION
ON FIELD TEST

Test participants were encouraged to continually hydrate, and drinking water stops were setup for use with their re-usable bottles. Despite the cool conditions and the 2 km walk back and forth from the trail site to the camp, judging by the smiles and laughter, a good time was had by all! See Page 10.

The team advisors were given the important duty of being a "team buddy". This is guiding a team of students from a school other than their own around the field test. In this way, they could observe the field test in real-time, interact with volunteers and other advisors (carefully to not distract the students) and share in the thrill of the competition.



SQUIRREL DISSECTION ON FIELD TEST (Teams were advised in advance*)

The Steering Committee again implemented a "Criminal Records Check" requirement for several Field Test and Orals support persons everyone passed! Teachers (who act a Trail Guides) already possess them as part of their annual school terms.

Post-test team \ advisors debriefings help schools plan future teams and provide feedback to the Field Test, Education, Orals and Steering Committees.

* DISSECTION STATEMENT

"Students, teachers, and advisors:

Again on this year's Envirothon provincial Field test, the Wildlife sub-committee (in consultation with the Test Writing and Steering Committees) may use a dissected wildlife specimen as part of a hands-on question. The Wildlife group strongly believes that dissection is an effective way of teaching students. Allowing students to observe a dissection allows real-life interconnections between organs and systems to be made in a real life situation. Most alternative forms of teaching only suggest an overly perfect model, not allowing for abnormalities or variation between specimens. It is also a great opportunity to teach ethics and respect for life. As wildlife biologists ourselves, we understand the importance of examining wildlife, looking for the stories their bodies can tell, and developing a respect and admiration for life!

If a dissection does occur, the health and safety of the students will been taken into consideration and students will not be exposed to anything dangerous. The specimen that is selected will not have been euthanized for this event, and will have died from other causes. The specimen will be treated humanely and with respect throughout the process and will be done in consultation with Manitoba Sustainable Development.

If you have any further questions or concerns please feel free to talk to, Jennifer Corvino, Barbara Fuller, or email Glenn Peterson at envirocoordinator@thinktrees.org

Friday evening

After the field test, and the Friday evening dinner at the Peterson Dining Hall, students and advisors attended a presentation on a unique education program by Keith Knudson who is the instructor for the Aquaponics Program at Dakota College at Bottineau. In 2014 Dakota College began working on an Aquaponics program that would become part of the Horticulture Department. Today students are able to receive an AAS degree or a certificate in Aquaponics. Keith was followed by the ice cream social and swap meet, we hear the cookies were fabulous! Thanks to our presenter, and all those who made food, crafts, etc., for trading. Thanks Keith.

Saturday

ORALS COMPETITION

Significant time and effort was made in 2016 by the Orals Subcommittee of the Steering Committee to "modernize" and "update" the Orals component of the Provincial Competition and this portion remained unchanged for 2017.

Appendix C contains a number of documents and team materials in that regard.

In summary, approximately one month before Provincials the teams were presented with the following Orals Challenge:

"There is growing support for the viewpoint that grazing cattle is a land use practice that is detrimental to native grasslands. Your team has been contracted by the Manitoba Sustainable Grazing Committee (MSGC), an organization with representatives from the beef industry, academia, government, and environmental non-government organizations. They are passionate about grassland conservation and beef production and they want your team to develop a public education campaign that will be used to support their efforts to build understanding about cattle grazing as a sustainable land use for native grasslands. They also want this campaign to promote the idea that a balanced diet containing beef is actually a way that the public can support the health and function of native grasslands. The MSGC values balanced and evidence-based communications, so your team needs to do some research before you can communicate the Committee's positions effectively through the public education campaign.

The following steps will help your team research the topic and prepare the two-year MGSC education campaign. Your team will present your work to \the Committee at their upcoming meeting at the International Peace Garden on May 27."

The Regional and Provincial Orals Challenges are included in Appendix C

Teams were instructed to prepare an oral presentation that could be digital, computer based (or poster–based as at Regionals). It was to be prepared in advance and brought on the teams own computer (which was then tested on site to ensure it worked properly). The teams were split into three presentation groups. All teams sat and listened to the presentations within their group. Three presentation rooms – two at Burdick Centre and one at Rindt Hall were set up for judges and spectators. This year there was a total of 21 judges (3 panels of 7 judges each, each panel seeing 6 or 7 teams).

Judging orientation and training was mostly done via email and online. In another break from tradition, there was no "Final Orals" presentation by the top three teams. Once the scores of the orals and field test scores were combined and tallied, three teams were announced as the top-ranking: Westwood Collegiate, Grant Park High School, and Fairholme and Baker Colony Schools

Final Standings

First Place: The team from Westwood Collegiate won this year's Manitoba Envirothon. The team includes: Sean Thain, Chase Hornby, Luke Roffey, Jarrid Brake, Alison Matwick and Advisor Dave Shoesmith. The Manitoba Forestry Association, host of the Envirothon will provide the team funds and support as they represent Manitoba at the NCF Envirothon in late July at Mount St. Mary's University, Emmitsburg, Maryland!



Second Place: The defending 2016 Champion team from Grant Park High School had another excellent event, placing second. Team included: Brett Macfarlane, Fiona Lebar, Clair Schon, Katherine Gledson, Jack Osiowy and Advisor: Mike Patenaude. Great job folks!



Third Place: The Fairholme and Baker Colony Schools team placed a very strong third. The team included Advisor: Ashleigh Maendel, Hadassah R. Maendel, Advisor: Artie Maendel, Delphine Waldner, Amaris Maendel, Hadassah S. Maendel and Thaddeus Waldner. Good work folks!



And to all the teams that competed, congratulations on a job well done! We hope you had fun too!

MANITOBA REPRESENTATION AT NCF ENVIROTHON

The 2017 NCF Envirothon is scheduled for the Mount St. Mary's University, Emmitsburg, Maryland, July 23 - 29, 2017. The Manitoba Envirothon has always helped subsidize the travel cost of our winning team to represent us at the North American championship. Teams that win the Manitoba Envirothon and advance to the NCF Envirothon are faced with additional costs for traveling to the competition. The Manitoba Forestry Association, as part of the Manitoba Envirothon Budget, provides up to \$5,000CDN to assist with these travel and event registration costs.



Although Manitoba did not clench one of the top spots, they competed well, made many new friends and saw The Smithsonian, not bad! Thanks for being such wonderful ambassadors for our program and Province!

Best of luck to the next team who will represent Manitoba in Idaho for the 2018 NCF – Envirothon, Theme: Western Rangeland Management: Balancing Diverse Views! Giddy up!

Thank You to Our Volunteers!

Without our tireless volunteers we would not be able to operate this program! There are many individuals who are dedicated to the Manitoba Envirothon, some saying that, "attending these events is the highlight of my year!" Each regional organization was able to draw on a large number of volunteers from local organizations and surrounding communities, and we thank them too!













In total about 90 individuals volunteered at the five regional competitions, and around 50 at the provincial competition!

Regional Volunteers

Each regional organization was able to draw on a large number of volunteers from local organizations and surrounding community. In addition, many long-time volunteers representing dozens of organizations, associations and businesses within Manitoba also volunteered at the Regional events. The following individuals and volunteered their time and resources to help plan, support and deliver the regional events:

Abby Tye Jaime Fox Michelle Schram Adam Collicutt James Flett Mitchell Timmerman Al Thorliefson Janelle Siekaniec Murray Smith Natalie James Amanda Benson Jeanne Besaw Angie Smith Jemma Harrison Neil Zalluski April Kiers-North Jennifer Corvino Nick Verras Paul Zeisman **Audrey Boitson** Jeremy de Graaf Avery Ascher John Perry Randy Dow Jolene Gardiner Barry Konzelman Ray Peebles Brenda Frank Ria Semenovich Justin Reid **Brett Carriere** Karen Tjaden Rick Wishart Robert Guilford Brigitte Demarchuk Katie McInnes **Brock Houndle** Kristin Malec Robert Nichol Kyla Maslaniec Carl Nixdorf Rockford McKay Cassandra Debets Larry de March Ryan Land Chelsea Gomley Laura Alsip Sachelle Johnston Christa Dubesky Laura Greenfield Scott Melvin Christine Chilton Lauren Beauchamp **Shane Robbins** Cliff Greenfield Lexine Leblanc Sharon Nixdorf Colby Desender Linda Christianson Shawn McMahon Shirley Esaruk **Curt Bueckert Lindsey Mitton** David Garrod Lisa Noctor Sloan Cathcart Devon Baete Stephen Howatt Lloyd Daniels Lois McDonald Sunil Kawthekar Diane Garrod Susan Kasian Dusty Molinski Lynda Matchullis Elaine Gauer Lynsey Foxon **Sybil Finnson** Ellen Monro Mae Elsinger Teresa Vitter **Emily Valiquet** Maggie Katzelay Tom Moran Mark Groner Glenn Peterson Tracy Maconachie Heather Alexander Marilyn Myer Whitney Moir Jack Crolly Matthew Forbes Wendy Creed Jacqueline Monteith Meghan Robidoux

If we have missed anyone or misspelled your name, our apologies!

Provincial Volunteers

A number of volunteers also commit time and energy to help make the Provincial event a huge success. These volunteers come from many areas: the local area, all levels of government, industry, different interest groups, retired teachers and professionals, Envirothon alumni, etc. They perform many duties, big and small, most behaved themselves, but all contributed to the overall success of the 2017 events. Thanks!

Jacqueline Monteith Lindsey Andronak Abby Tye Aida Adimoghaddam Jane Seniw Mae Elsinger Andrea Swain Jennifer Corvino Mitchell Timmerman Barbara Fuller John Dojack Murray Smith Brandon Clayton John Shearer Myrna Potton Brenda Frank Justin Reid Patricia Pohrebniuk Brendan Carruthers Krysten Leroux Rebecca Zettler Byrnes Benoit Kyla Maslaniec Rick Wishart Cassidy Mazur Kyle Fontaine Shane Wruth Colby Desender Larry de March Sloan Cathcart **Dave Wotton** Laura Alsip Stephanie Woltman Lauren Beauchamp Steven Hills Denise Levesque Devan Asu Lee Fedorchuk Susan Kasian Lee Hrenchuk **Doug Pratt** Tim Byers Elaine Gauer Linda Christianson Glenn Peterson **Lindsay Harrington**

Again, if we have missed anyone or misspelled your name, our apologies!

Volunteer "In-kind" Tracking

To get a better estimate about the "true" cost of delivering a Manitoba Envirothon it was decided that we should track the time, effort and expenses that our many wonderful volunteers expend during the year. The Steering Committee and Education Subcommittee updated and used an Excel form developed for the 2006 Canon Envirothon (Winnipeg). Based on realistic wage and private vehicle mileage rates we estimate for the 2017 program:

SUB-TOTAL Time	\$59,027.50
SUB-TOTAL Mileage	\$ 6,087.50
SUB-TOTAL Out-of-Pocket (not claimed for reimbursement)	\$ 2,572.50
TOTAL ALL Value of In-kind	\$67,687.50

This value represents the additional "cost" of the overall program when added to the financial expenditures. It shows the generous nature of our partners, volunteers and their employers who so freely donate time and materials – and especially labour! Thank You!

2017 Steering Committee Members

Name	Steering Committee Position	Representative Organization
Andrea Swain	Orals	Emerge Knowledge
Barbara Fuller	Chair Education Committee	Teacher - retired
Brenda Frank	Volunteer Recruitment and Training	Manitoba SD: Forestry Branch - retired
Brendan Carruthers	Strategic Planning and Fundraising Committee Co-Chair	Manitoba Hydro - retired
Byrnes Benoit	Co-Chair SC Media and Communications	Spectra Productions
Glenn Peterson	Envirothon Coordinator, Forestry	Manitoba Forestry Association
Jacqueline Monteith	Education Chair, Regional Host, Northern Coordinator	Frontier School Division
Jennifer Corvino	Co-Chair SC Test Writing Committee, Wildlife, Orals	Manitoba Sustainable Development (SD)
John Sinclair	Orals Committee	University of Manitoba: Natural Resource Institute
Justin Reid	Regional Host Organization Representative - Wildlife, Orals	La Salle Redboine Conservation District
Lee Fedorchuk	Forestry	Manitoba SD: Forestry Branch
Lee Hrenchuk	Aquatics	IISD- Experimental Lakes Area
Linda Christianson	Logistics	Manitoba SD - retired
Lindsey Andronak	Soils Expert	Agriculture Canada
Lois Macdonald	Regional Host Organization	Riverbank Discovery Centre
Mae Elsinger	Agriculture Expert	Citizen
Murray Smith	Logistics	Manitoba MAFRD retired
Paula Grieef	Regional Host Organization Representative	Oak Hammock Marsh Interpretive Centre
Rick Wishart	Education, Wildlife	Ducks Unlimited - retired
Sloan Cathcart	Regional Host Organization Representative - Communications	Manitoba SD: Parks Branch
Steven Hills	Orals, GIS, GPS	Assiniboine Community College
Susan Kasian	Test Writing Committee - Aquatics	DFO - retired
Wendy Creed	Forestry, Orals, Map support	Manitoba SD: Forestry Branch

Thank You to Our Sponsors!

We would like to thank the 2017 Manitoba Envirothon Sponsors, Funders and Partners whose generosity helped us make this youth environmental education program a success.

Partners of the 2017 Manitoba Envirothon

HOST ORGANIZATION

Manitoba Forestry Association

REGIONAL HOSTS

Oak Hammock Marsh Interpretive Centre
Frontier School Division \ University College of the North
LaSalle Redboine Conservation District
Manitoba Parks and Natural Areas Branch
Riverbank Discovery Centre













LEGACY PARTNERS The Government of Manitoba

Agriculture
Sustainable Development
Education & Training

SUSTAINING PARTNERS

Manitoba Hydro

The Manitoba Forestry Association would like to thank the following organizations for their team sponsorship, in-kind or financial support:

In-Kind and Financial Support

A Rocha Prairie Canada

Agriculture and Agri-Food Canada

Assiniboine Community College

Assiniboine Hills Conservation District

Birds Hill Physiotherapy

Brandon Environment Committee

Byers Environmental Studies

Canadian Kraft Paper Industries Ltd.

Ducks Unlimited

East Interlake Conservation District

Environment Canada Frontier School Division Harvest Moon Society International Peace Garden

LaSalle Redboine Conservation District

Louisiana Pacific Ltd. Manitoba Agriculture

Manitoba Sustainable Development

Fisheries

Forestry & Peatlands

Parks and Protected Spaces

Manitoba Education & Training

Manitoba Hydro Manitoba Museum Native Plant Solutions Nature Conservancy of Canada

Nature Manitoba

Natural Resource Institute-University of

Manitoba

North Dakota Forest Service

Nutrients For Life

Oak Hammock Marsh Interpretive Centre

Parks Canada

Pembina Valley Conservation District

Peterson Family Potton Family

Prairie Architects Ltd.

Prairie Spirit School Division Riverbank Discovery Centre

Scott MacDonald

Smith Poultry Consulting Spectra-Productions Ltd. Spruce Products Ltd. Sunrise Credit Union

Turtle Mountain Conservation District

University College of the North

University of Manitoba University of Winnipeg Université de Saint-Boniface

Youth Encouraging Sustainability (Y.E.S.)

Team Sponsorship

- ✓ Canadian Kraft Paper Industries Ltd. (2 Regional teams)
- ✓ East Interlake Conservation District (2 Regional, 1 Provincial team)
 - ✓ Elmwood High School
 - ✓ Frontier School Division (5 Regional, 2 Provincial Teams)
- ✓ Pembina Valley Conservation District (1 Regional, 1 Provincial Team)
 - ✓ Prairie Rose School Division (6 Regional, 1 Provincial Team)
 - ✓ Prairie Spirit School Division (7 Regional, 3 Provincial Teams)
- ✓ Sexton Group \ Taiga Building Products (1 Regional, 1 Provincial Team)
 - ✓ Sisler High School (3 Regional Teams)
- ✓ Swan Lake Watershed Conservation District (4 Regional, 2 Provincial Team)
 - ✓ Virden Collegiate Student Council (3 Regional, 1 Provincial Team)

Thanks one and all for your generosity!

2016 MANITOBA ENVIROTHON FIELD TEST



THANKS TO THE TEST WRITING COMMITTEE AND THEIR GPS UNITS, AND TO JUSTIN REID OF LASALLE REDBOINE CONSERVATION DISTRICT FOR THE OUTSTANDING MAP WORK!

APPENDIX B - TEAM LIST

Event	School	# Teams	School Division
Northern	Cormorant Lake School	1	Frontier School Division (FSD)
	Margaret Barbour Collegiate Institute	2	Kelsey School Division (KSD)
	Duke of Marlborough	1	FSD
	Swan Valley Regional Secondary School	4	Swan Valley School Division (SVSD)
	R. D. Parker Collegiate	1	Mystery Lake School Division (MLSD)
SouthWest	Carman Collegiate	3	Prairie Rose School Division (PRSD)
	Elm Creek School	2	PRSD
	Nellie McClung Collegiate	2	Prairie Spirit School Division (PSSD)
	Pilot Mound Collegiate	1	PSSD
	Prairie Mountain High School	3	PSSD
	St. Claude School Complex	1	PSSD
	Miami School	2	PRSD
Winnipeg	Elmwood High School	1	Winnipeg School Division (WSD)
	Gimli High School	1	Evergreen School Division (ESD)
	John Taylor Collegiate	1	St. James - Assiniboia School Division (SJSD)
	Shaftesbury High School	1	Pembina Trails School Division (PTSD)
	Maples Met School	1	Seven Oaks School Division (SOSD)
	St. James Collegiate Institute	2	SJSD
	Fort Richmond Collegiate	1	PTSD
	Vincent Massey Collegiate	2	PTSD
	Sisler High School	3	WSD
	Warren Collegiate	1	Interlake School Division (ISD)
	Westwood Collegiate	1	SJSD
Eastern	Lord Selkirk Regional Comprehensive Secondary School	4	Lord Selkirk School Division (LSSD)
	Gimli High School	1	ESD
	Sturgeon Heights Collegiate	1	SJSD
Western	Brandon Crocus Plains	6	Brandon School Division (BSD)
	Fairholme \ Baker Colony Schools	1	PSSD
	Rivers Collegiate	1	Rolling River School Division (RRSD)
	Grant Park High School	2	WSD
	Virden Collegiate Institute	3	Fort La Bosse School Division (FLBSD)
	William Morton Collegiate Institute	1	Pine Creek School Division (PCSD)
	BOLD = Rookie Teams		
5 Events	32 schools	58	17 Divisions
Provincial	Nellie McClung Collegiate	1	PSSD
	Westwood Collegiate	1	SJSD
	St. James Collegiate Institute	2	SJSD
	Prairie Mountain High School	1	PSSD
	Cormorant Lake School	1	FSD
	Grant Park High School	2	WSD
	Carman Collegiate	1	PRSD
	Shaftesbury High School	1	PTSD
	Gimli High School	1	ESD
	Virden Collegiate Institute	1	FLBSD
	Duke of Marlborough School	1	FSD
	Swan Valley Regional Secondary School	2	SVSD
	Fort Richmond Collegiate	1	PTSD
	R. D. Parker Collegiate Fairholme & Baker Colony Schools	1	MLSD
	Lord Selkirk Regional Comprehensive Secondary School	1 1	PSSD LSSD
	THE SERVICE PRODUCT CONTINUED BUSINESSED OF STRONG STRONG	1	LJJU
	16 Schools	19 Teams	11 Divisions

REGIONAL SUMMARIES

Regional: Eastern

Host Organization: Manitoba Sustainable Development, Parks and Protected Spaces Branch

Location: Alf Hole Goose Sanctuary and Rennie Community Centre, Rennie, MB.

Date: Friday, April 24, 2017

Teams Participating: See Team Summary list, Pg. 25

Trainers:

Soils & Land Use: Mitch Timmerman (MA) **Native Plants & Forestry:** Adam Collicutt

Wildlife & Wildlife Management: Jeremy de Graaf Water & Aquatic Ecosystems: Lauren Beauchamp

Theme: Lindsey Mitton **Orals:** Sloan Cathcart (MSD)

Orals Judges: Christine Chilton (NCC); Curt Bueckert, Lauren Beauchamp

Field Test Information: Questions generated by prov. TWC. All stops outside on Sanctuary grounds. Orals stop was inside the Visitor Centre. Map attached.

Format of Orals Component: Students were presented the topic two weeks before the competition and prepared a poster and presentation to address the challenge.

Schedule of Events: See Pg. 27

Food: Participants were asked to bring a bagged lunch. Snacks and refreshments provided by host committee.

What Worked: Organization was good and field test stops were easy to set up. Despite very poor weather (blizzard!), teams still made it out and day ran relatively smoothly, even with several volunteers cancelling due to the snowstorm.

Needs Improvement: Too few teams still. One team cancelled. Need to continue to reach out to more schools in the region (Lac du Bonnet, Whitemouth and Steinbach) to grow the Envirothon program. Need to also recruit more volunteers, so that when we have several dropouts it is not as big of a pressure on the committee. Purchase umbrellas for each team, to help keep test paper dry in case of inclement weather.

Total Cost: (6 teams) Food - \$100.00, Facilities: - \$150.



Events



2017 Eastern Region Envirothon



Hosted by Manitoba Parks Monday, April 24, 2017

Alfred Hole Goose Sanctuary Rennie, Manitoba

Schedule of Events

Time	Activity	Location
9:00 – 9:30	Registration, Assignment of Team Numbers & Snack for Teams	Visitor Centre
9:30 - 10:00	Welcome address	Visitor Centre
10:00 - 11:00	Specialty Area Training	Community Centre
11:00 - 11:30	Orals/Poster Prep	Community Centre
	Teachers briefed on trail	
11:30 - 12:15	Lunch**	Community Centre
12:15 - 12:30	Walk to field test locations	_
12:30 - 2:30	Field Test & Orals Competition	Goose Sanctuary grounds
2:30	Reconvene Teams	Visitor Centre
2:30 - 3	Thank-you & Wrap Up	Visitor Centre

Special Notes:

**Lunch is not provided - please bring a bagged lunch.

Drinking water and snacks will be available throughout the day. Please bring a reusable water bottle.

For more information please contact Sloan Cathcart at 204-471-6273.



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Visit us online at manitobaparks.com



2017 Field Test Stop 11 (Orals Presentation) is inside the Visitor Centre



Region: South

Host Organization: La Salle Redboine Conservation District

Location: Pinkerton Lakes Wildlife Refuge Area, Treherne

Date: April 19, 2017

Teams Participating: See Team Summary list, Pg. 25

Trainers:

Soils & Land Use: Jo-Lene Gardiner, Natalie James, Karen Tjaden **Native Plants & Forestry:** Neil Zalluski, James Flatt, Scott Melvin

Wildlife & Wildlife Management: Jennifer Bryson, Brett Carriere, Tom Moran Water & Aquatic Ecosystems: Devon Baete, Susan Kasian, Larry De March

Theme: Jemma Harrison, April Kiers-North, Chelsea Gormley **Orals Trainers:** Al Thorliefson, Nick Verras, Stephen Howatt

Orals Judges:

Orals A = Timekeeper: Cliff Greenfield; Judges: Nick Verras, Karen Tjaden, Scott Melvin
Orals B = Timekeeper: Al Thorleifson; Judges: Stephen Howatt, Christine Chilton, Jacqueline
Monteith

Field Test: Standard Regional Test with Local Questions added

Orals: Standard Regional Poster Presentation

Schedule of Events: See Pg. 30

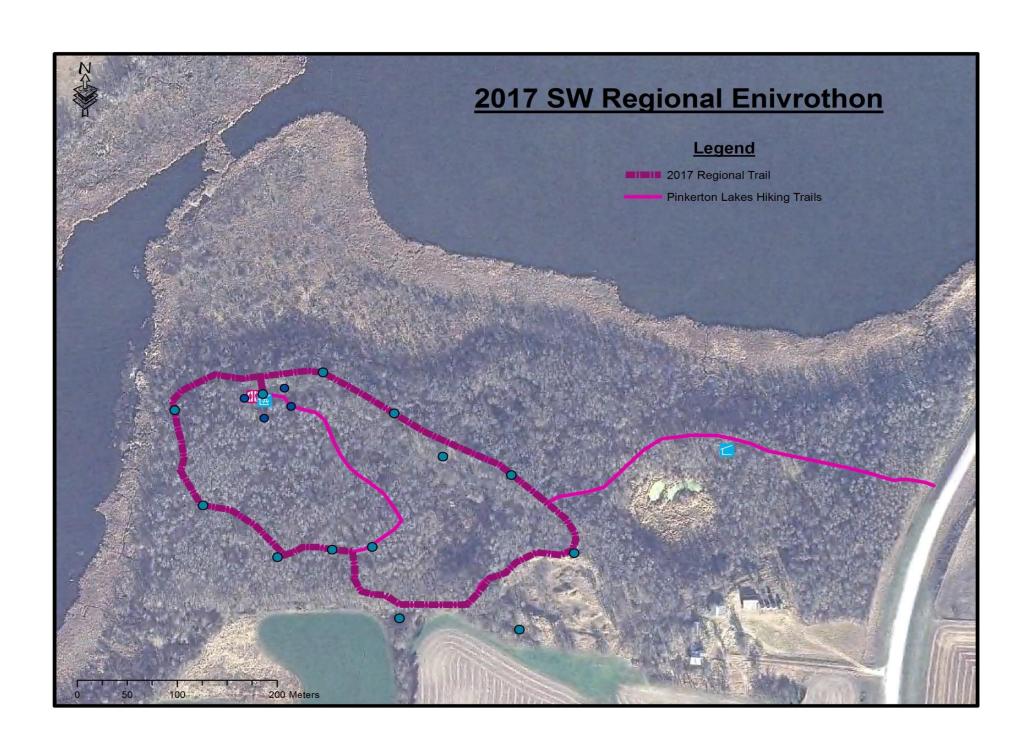
Budget: The regular monetary costs involved with the Southern Regional are comprised of washroom facilities, party tent, and lunch for teams and volunteers. There are many in-kind costs that are not covered in the normal reporting of the event costs that include site preparation, planning time and other administration costs. Included in this year's budget are the in-kind costs that we can accurately represent for hosting the regional event this year.

Things That Worked: Once again, the volunteer core that works with us every year proved themselves indispensable. We would not be able to put on this event without our volunteers. Our caterers provided a delicious and nutritious meal to all of our event attendees, and we had wonderful weather for hosting an outdoor event. The event site is well suited for a regional event and with each year improvements are added to make the site more weather proof.

Things To Improve: The costs of hosting the regional event is increasing including the costs of renting washroom facilities and the party tent for our main event area. Our host group will be undertaking activities in order to help cut down and lower our hosting costs.

2017 South West Regional Envirothon – Pinkerton Lakes Wildlife Refuge Agenda

	olunteers 2:30 - 09:30			
07	:30 - 09:30			25.5: #
		Trail	Set up tents, tables	CD Staff
09:30 - 10:00 09	:30 - 10:00	Main Tent	Registration	Team - Angie
		Fire	(Teams And Volunteers)	Volunteer - Lynda
		Bannock & Sp. Tea?	Snack & Drinks	Natalie
10:00 - 10:15 10	:00 - 10:15	Main Tent	Welcome And Orientation	Justin
10:15 - 10:45		Main Tent	Orals Workshop Training	Nick, Al, Laura
10	:15 - 10:30	Outside Main Tent	Volunteer Orientation	Justin, Jennifer
		Outside Main Tent	Teacher Orientation	Lynda
10	:30 - 10:45		Orals Judging Training	Cliff, Laura
10:45 - 11:30 10	:45 - 11:15		Topic Training Sessions	
		Parking Lot	Soils	Jo-Lene, Natalie
		Parking Lot	Forestry	Neil, Jamie
		Main Tent	Wildlife	Jennifer, Murray, Tom
		Boat Launch	Aquatics	Susan, Devon, Larry
		Main Tent	Theme/Local	Jemma
11	:15 - 11:45	Main Tent	Lunch For Volunteers	
11:30 - 12:00		Main Tent	Lunch For Students	
11	:45 - 12:45	Parking Lot Trailhead	Trailhead Orientation For	Justin, Jennifer
			Volunteers & Set-up	,
12:00 - 12:45		Main Tent	Trailhead Orientation For	Lynda
			Teams & Get To Start	_,
12:45 - 15:25 12	:45 - 15:25	Trail	TRAIL TEST & 20 Min Orals	
15:25 - 15:45		Main Tent	Test Ends, Hand In Materials	Lynda
45	:25 - 15:45	Trail	Test Ends, Pack Up Equip.	
15	123 - 15:45	ITall	(Leave At Stop)	
15:45 - 16:00		Main Tent	Nutrition Break, Wrap-Up,	Justin
	15:45+	Main Tent	Marking Team	Lynda, Jennifer, Justin
	15:45+	All Locations	Take Down	CD Staff
				Other Volunteers



Region: North

Host Organization: Frontier School Division, University College of the North

Location: University College of the North, The Pas

Date: April 25 & 25, 2017

Teams Participating: See Team Summary list, Pg. 25

Trainers:

Native Plants & Forestry: Shawn McMahon (UCN) Water & Aquatic Ecosystems: Marilyn Myer (UCN)

Wildlife & Wildlife Management: Jennifer Corvino (MSD)

Soils & Land Use: Jeanne Besaw (Canadian Kraft Paper Industries)

Theme: Justin Reid (LSRCD)

Orals Judges:

Jennifer Corvino (MSD), Avery Ascher (UCN), Lynsey Foxon (MSD)

Additional Volunteers: none

Additional Sponsors: none

Field Test: Standard Regional Test (no Local Questions added)

Orals: Standard Regional Poster Presentation

Schedule of Events: See Pg. 33

Things that worked: Larger number of teams, First day of hands-on training session, large number of volunteers, volunteers from MFA and SC – thank you, UCN willing to accommodate our event, Drum ceremony intro to event, training sessions were excellent.

Things to Improve: Cannot host lunch with large number of teams, field test venue not ideal, teams arriving late on Day 1 due to travel, teams dropping out close to the event, finding new donors in The Pas for long-term support, lunch at UCN was very expensive, need larger home base with more teams, need TEK and elders involved more prominently.

2017 Northern Regional Envirothon Schedule Tuesday, April 25

8:30 – 9:00am	Arrival
	Registration
9:00 – 10:30am	Welcome
	Introductions
	Drumming Ceremony
	Training Session #1
10:30 – 10:45am	Break
10:45am – 12:00pm	Training Session #2
12:00 – 12:45pm	Lunch
12:45 – 2:00pm	Training Session #3
2:00 – 2:15pm	Break
2:15 – 3:30pm	Orals Prep

Wednesday, April 26

8:30 – 9:00am	Arrival
9:00 – 10:30am	Orals Prep
10:30am – 12:30pm	Field Test
12:30 – 1:15pm	Lunch
1:15 – 2:00pm	Wrap-Up

Regional: Winnipeg

Host Organization: Oak Hammock Marsh Interpretive Centre (OHMIC)

Location: Oak Hammock Marsh Interpretive Centre

Date: Thursday, April 20, 2017

Teams Participating: See Team Summary list, Pg. 25

Training:

Water & Aquatic Ecosystems: Dusty Molinski (OHMIC)

Soils & Land Use: Teresa Visser (OHMIC)

Wildlife & Wildlife Management: Ria Semenowich (OHMIC)

Native Plants & Forestry: Glenn Peterson (MFA)
Theme: Sachelle Johnston (Native Plant Solutions)

Field Test: Standard Regional Test with Local Questions added

Orals: Standard Regional Poster Presentation

Schedule of Events: See Pg. 35

Orals Judges: Audrey Boitson (East Interlake Conservation District - EICD), Brigitte Demarchuk (EICD), Laura Alsip, Tracy Maconachie (Ducks Unlimited Canada - DUC), Linda Christianson, Jennifer Corvino (MSD)

Food: Muffins, donuts, cookies and juice were provided first thing in the morning, Lunch and hot chocolate was provided for all the volunteers, Food was provided by the OHMIC Café and Tim Horton's

What Worked: Organization was good, Topic training – good to have 1.5 hours, printing team number on test, most of training provided in-house, great location -wetland and upland habitats

Needs Improvement: The 15 minutes the students get to work on their poster is a little chaotic, the larger number of teams meant more students and did not have much more equipment so some of the training more difficult and need more time, Theme training materials and field test questions did not seem to mesh well

Schedule



8:30 a.m. Registration - Foyer

9:15 a.m. Welcome - Theatre

9:30 a.m. Specialty Area Training

Forestry — Blackduck Aquatics — Clubhouse Wildlife — Seminar Soils — Canvasback Theme — Theatre

11:00 a.m. Poster prep (students) – Canvasback Teachers briefed on trail – Theatre

11:15 a.m. Lunch (students)

11:30 a.m. Lunch (teachers)

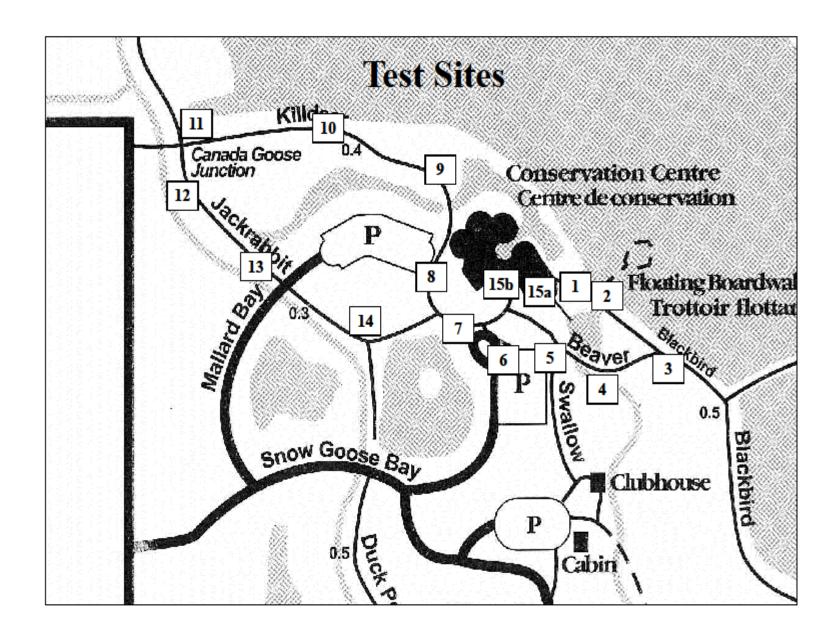
12:15 p.m. Field Test & Orals

3:15 p.m. Thank yous & Wrap up - Theatre

3:30 p.m. Depart



2017 Winnipeg Regional (Oak Hammock Marsh)



Regional: Western

Region: Western (Brandon)

Host Organization: Brandon Riverbank Inc.

Location: Riverbank Discovery Centre, Brandon

Teams Participating: See Team Summary list, Pg. 25

Volunteer Trainers:

Soils & Land Use - Elaine Gauer (MA)

Native Plants & Forestry – Kyle Maslaniec (MSD) & Paul Zeisman

Wildlife & Wildlife Management – Jennifer Bryson (MSD)

Water & Aquatic Ecosytems – Devon Baetes (AHCD)

Theme: Justin Reid (LRBCD)

Orals Trainers: Lois MacDonald (RDC)

Orals Judges: Clayton Robins, Lindsay Hargraves (Brandon), Shane Robins (MCDA)

Field Test: Standard Regional Test with Local Questions added

Orals: Standard Regional Poster Presentation

Schedule of Events: See Pg. 40

Things that worked:

- 1. Guidance provided by Justin Reid and Jennifer Bryson was incredibly helpful both in advance of the event and throughout. As this was our first year hosting we had many questions, they answered them all promptly and succinctly.
- 2. Volunteers arrived in good spirits and ready to work which was fantastic!
- 3. The 2017 theme made writing local test questions relatively easy, especially considering our location in the middle of a floodplain.

Things to improve:

1. Team registration prior to events – In hopes to alleviate issues with team placement and waitlists, the committee might consider developing a policy regarding team application/ registration. There was quite a bit of conversation amongst volunteers at our event regarding this, as it was very clear on event day that 4 of the 6 teams Crocus Plains competing had no desire to attend. The consensus was that these teams being admitted

was very unfortunate as there were likely many teams waitlisted who did not get to compete.

- 2. School provided chaperones We were somewhat frustrated on event day to find out that schools had been told they did not have to send at least one chaperone per team from their school especially considering it had been explained to us that each team would have at least one accompanying chaperone who could act as a Trail Guide during the competition. Finding volunteers for full day, mid-week events can be challenging. This unexpected change in plans required us to pull volunteers from other tasks to act as Trail Guides, which placed further work load on everyone across the board. Each school should be required to send at least one chaperone per team entered.
- 3. Team registration information In order to process registration on event day faster, it would be ideal if each teams' students' names were provided prior to event day. This would allow us to have a list of teams/ student names prepared in advance so that names could simply be checked off rather than each name having to be taken and written out.



Brandon Riverbank Inc.

Riverbank Discovery Centre #1-545 Conservation Drive, Brandon, MB R7A 7L8

2017 West Region Envirothon April 18, 2017

Schedule of Events

9:00 a.m. Foyer Registration for Teams and Volunteers

Snacks and Drinks

9:30 a.m. Multi-Purpose Room Welcome and Orientation

9:45 a.m. Multi-Purpose Room Orals Workshop Training

10:15 a.m. TBD Topics Training Sessions

11:00 a.m. TBD Orals Poster Prep

Teachers briefed on trail

Lunch for volunteers

11:30 a.m. Multi-Purpose Room Lunch for students

12:15 p.m. TBD Trailhead Orientation for Teams

12:30 p.m. Trail Trail test & Orals

3:15 p.m. Multi-Purpose Room Thank You's & Wrap Up



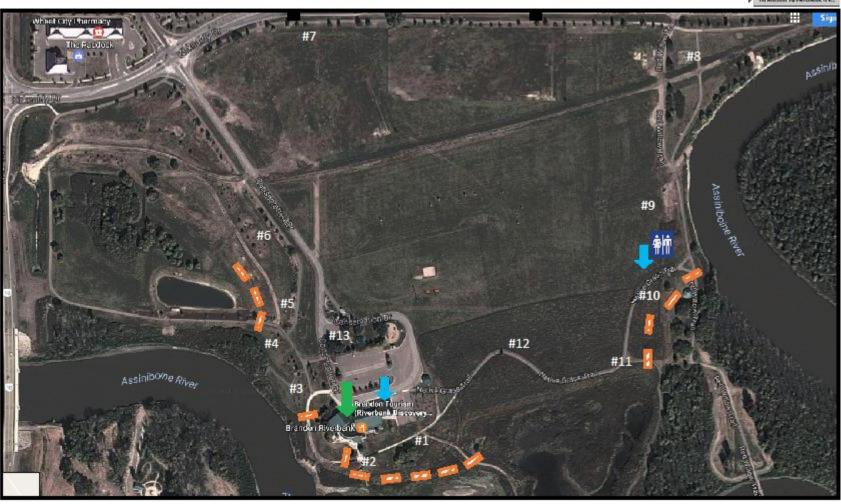


2017 West Regional Envirothon Trail Test Map



- On the Test sheets, each question lists which numbered stop correlates to each question. Be sure you are answering the right questions for each stop!
- Each team will follow a different trail route! Be sure to check your team package and follow your unique Team Trail Route!
- Orals Prep and Presentation areas are inside the Riverbank Discovery Centre.
- There are a number of barricaded areas, do not enter these areas! Stay on the competition trail!
- When your team crosses
 Conservation Drive please be very aware of passing vehicles!
- Please stay on paved/ gravel paths wherever possible avoid native prairie grasses!





Appendix C – Orals Challenges

Manitoba Envirothon 2017 – Regional Oral Competition Question

Beneficial Management Practices (BMPs) allow us to use our resources in a way that is sustainable for the economy, environment, and society. Identify a concern related to agricultural soil and water conservation in your own community. Select <u>a minimum of three BMPs</u> from your study materials, or other sources, that could work together to address the area of concern you identified.

- Describe how the concern in your community impacts the five Envirothon study topics.
- 2) Describe how your set of BMPs either improves or utilizes the resources associated with the 5 Envirothon study topics.

Choose one of the BMPs and answer the following:

- 3) Briefly describe the scientific or technical justification for your chosen BMP.
- 4) For your chosen BMP outline how it will be implemented, including equipment, materials, labour, land, time, and money.
- 5) Name at least three potential partners. Describe how one of these potential partner organizations could assist with the design or implementation of your chosen BMP. Why would this organization want to partner with you?
- 6) Provide an example of how your chosen BMP has been applied in Canada, and which resource it is meant to conserve.
- 7) Describe a BMP you found that seemed like a good solution at first, but after further study was not a good fit for the community or physical aspects of the site. Why did it not fit?

Remember the 5 Envirothon study topics are: Native Plants & Forestry, Wildlife & Wildlife Management, Soils & Land Use, Water & Aquatic Ecosystems, and Agricultural Soil & Water Conservation Stewardship



2017 Manitoba Envirothon Regional Orals Directions

- 1. Teams will hand-in their poster and cue cards when they register at the Regional event.
- 2. Team name must be identified on the back of the poster and cards.
- 3. We will allow one single-sided index-card per student for speaking notes. Index card will be 3"x5".
- 4. The Poster size will be no larger than 36"x48" (at Staples this is defined as the 'Project and Presentation Display Board').
- 5. Teams are allowed to use computer generated graphics/fonts/images to create their poster OR their poster can be computer printed.
- 6. Judges will consider readability and clarity of the poster, which is worth up to 30% of the presentation.
- 7. Teams must complete and hand-in at the Regional Event a "Statement of Authorship"

2017 Manitoba Envirothon Provincial Orals Challenge

There is growing support for the viewpoint that grazing cattle is a land use practice that is detrimental to native grasslands. Your team has been contracted by the Manitoba Sustainable Grazing Committee (MSGC), an organization with representatives from the beef industry, academia, government, and environmental non-government organizations. They are passionate about grassland conservation and beef production and they want your team to develop a public education campaign that will be used to support their efforts to build understanding about cattle grazing as a sustainable land use for native grasslands. They also want this campaign to promote the idea that a balanced diet containing beef is actually a way that the public can support the health and function of native grasslands. The MSGC values balanced and evidence-based communications, so your team needs to do some research before you can communicate the Committee's positions effectively through the public education campaign.

The following steps will help your team research the topic and prepare the two-year MGSC education campaign. Your team will present your work to the Committee at their upcoming meeting at the International Peace Garden on May 27.

- 1. In your research you have discovered that native grasslands are endangered worldwide and that many endangered species depend on grasslands. Highlight your research related to these points by answering the following:
 - a. One key threat to grasslands is land conversion for growing annual crops. Use your knowledge about soils and land use to explain five of the agricultural land capability limitations that make parts of Manitoba's grasslands less suitable for growing annual crops and more suitable for grazing.
 - b. Explain two other significant threats to native grasslands in Manitoba.
 - c. List up to five nationally listed Species at Risk two plants and three animals that have been found in Manitoba grasslands.
- 2. You have also discovered that native grasslands provide many ecological goods and services (EG&S), supported by ecological processes. Highlight your work related to this issue by:
 - a. Listing five ecological goods and services that can be provided by native grasslands in Manitoba.
 - b. Select one good or service related to water conservation and explain how it is supported by the ecological processes found in Manitoba's grasslands.
 - c. Explaining why native grasslands are dependent on disturbances, especially from use by large herbivores.
 - d. Briefly describing a research study (purpose, methods, results, conclusions) that supports why non-use or "idling" of native grasslands by not grazing them reduces the quality of their ecological processes.

- e. Briefly describing a research study (purpose, methods, results, conclusions) that investigates one or more grazing practices that can be used, or are being used by beef producers to support ecological processes and what grazing practices should be avoided.
- 3. Using what you have learned in your background research for questions #1 and #2 consider what key messages the public should know about cattle grazing as a beneficial management practice for native grasslands. Be sure the public education plan you design for MSGC delivers the following:
 - a. Three carefully worded messages that your campaign will deliver to the public about cattle grazing as a land use for native grasslands.
 - b. A message to the public about what they can do to support land use practices that are compatible with native grasslands.
 - c. An explanation of why your team is recommending these messages to the Committee. For example, describe how these messages support the Committee's position that cattle grazing on native grasslands can be beneficial.
 - d. List at least 5 ways in which you recommend the Committee deliver these messages to the public. Explain why you chose those 5 methods.

Instructions to Teams for Provincial Orals Competition - 2017

Congratulations! While you wait to confirm your Team has accepted a spot to represent your school at the Manitoba Envirothon, please review this information! We don't want you to wait to get started!

The Manitoba Envirothon turned 20 last year and made a large change to our Provincial Orals Challenge and it will remain the same for 2017. Please read these important tips for the Oral Presentation. The Oral Presentation is your team's opportunity to work together to explore the current environmental issue and creatively convey that information to an audience.

3 Important Things you Need to Know:

- 1) Attached to this letter you will find the question, the judge's scoring guide will follow soon. You have between now and May 27th to prepare your Oral Presentation.
- 2) You may choose to use any format for your Oral Presentation, including digital!
- 3) At the Manitoba Envirothon, you will present your Oral Presentation to a panel of judges AND (up to) seven other teams. Don't forget it's a larger room than in the past!

Tips to help you prepare:

- Read the Rules and Procedures document for details about the Oral Presentation
- http://www.thinktrees.org/my folders/2017 Envirothon/RulesandProcedures Final2017.pdf
 Specifically read pages 17-20 and pages 23-24.
- We have left the **format** as wide-open as possible. Be creative! Remember we are looking for all team members to have an opportunity for public speaking.
- If you choose to use a **digital format** please be sure that you bring the presentation loaded on a laptop. We will provide the screen and projector. Your team will provide the laptop. There will be a chance to test your laptop with the projector well ahead of your presentation time.
- We also recommend you **bring a back-up** copy preferably on another lap top. IN addition, you could bring it on a flash drive. And even bring a paper copy as a back-up to your back-up!
- No matter how you choose to create your presentation you should know that you can not
 include any audio (other than your own voices), if you show an image you must write the source
 on the image (even if you are the one who created it), and you will not have access to the
 Internet in the Presentation Room.
- If a digital format is not for you, not to worry. As you can see from the Scoring Guide, the judges are looking for teamwork, creative, accurate information, and all the basics of good public speaking.
- Ask yourself if you can build on the work you have already done for your Regional Envirothon presentation?

Above all else, remember that your Oral Presentation score makes up 40% of your final Manitoba Envirothon score. We want you to have fun but this is also an important part of your Envirothon experience.

We look forward to seeing you at the event!

Sincerely,

The Manitoba Envirothon Steering Committee

Also, please complete and turn in the following:

Manitoba Envirothor Statement of Author	
All Manitoba Envirothon Te	eam Members must sign this form.
2017 Manitoba Enviroth	team affirm that the presentation we will present at the non Oral Competition has been prepared and written bers in attendance at this event.
Date:	
School or Organization:	
Team Name:	
Team Member Signature	es:

MANITOBA ENVIROTHON WINNERS TO REPRESENT PROVINCE IN MARYLAND

Winnipeg, Manitoba - The Manitoba Forestry Association is pleased to announce the winners of the 2017 Manitoba Envirothon. Fifty-eight teams of high-school students from across the province have been studying this year's theme of Agricultural Soil and Water Conservation Stewardship, with 19 teams competing at the International Peace Garden for the championship (from May 25th – 27th). A team representing Westwood Collegiate in Winnipeg was this year's winners, followed closely by last year's champs Grant Park High School. A team made up of students from the Fairholme and Baker Colony Schools took third place, in a closely fought competition! Congratulations to all who participated and thanks to all the Regional hosts, volunteers, citizens, prize and award donators, facilities and services and the International Peace Garden staff for contributing to the success of all our events!

The Manitoba Forestry Association Envirothon Steering Committee would also like to announce that Kadeyn Labossiere of Prairie Mountain High School, Somerset has been awarded the 2017 Jim Potton Environmental Responsibilities Scholarship, to continue his education.

Friday, May 26 saw the teams travelling a course of 15 Trail Test stations (around Lake Udall at the International Peace Garden) where they answered a series of questions on core topics; water and aquatic ecology, wildlife, native plants and forestry, soils and land use and the theme topic, water and soil conservation stewardship – with an emphasis on beneficial management practices. On Saturday May 27, the teams presented their proposed solutions to an environmental challenge related to soil and water conservation – with an Oral Presentation before a panel of judges and other teams.

The Manitoba Envirothon was first held in 1997 at Birds Hill Park. As Manitoba's oldest environmental education organization, the Manitoba Forestry Association's mission is to educate all Manitobans about wise management of trees and forests, to ensure that they remain healthy and productive for today and continue to provide for future generations. Over 3,000 students have participated in the Manitoba Envirothon since the first four teams participated in 1997.

The Westwood Collegiate Team will now go on as Ambassadors of Manitoba to compete at Mount St. Mary's University, Emmitsburg, Maryland from July 23 - July 29, 2017 at the NCF Envirothon! Over 55 teams are expected to attend from across the continent and China. Good Luck folks!

First Overall - Westwood Collegiate (I-r)



Sean Thain, Chase Hornby, Luke Roffey, Jarrid Brake, Alison Matwick Advisor: Dave Shoesmith

Second Overall - Grant Park High School (I-r)



Brett Macfarlane, Fiona Lebar, Clair Schon, Katherine Gledson, Jack Osiowy Advisor: Mike Patenaude

Third Overall - Fairholme & Baker Colony Schools (I-r)



Advisor: Ashleigh Maendel, Hadassah R. Maendel, Advisor: Artie Maendel, Delphine Waldner, Amaris Maendel, Hadassah S. Maendel, Thaddeus Waldner

For further information on Envirothon, please contact: Glenn Peterson, Envirothon Coordinator: 204-453-3182 Byrnes Benoit, Co-Chair: 204-452-9832



JIM POTTON ENVIRONMENTAL RESPONSIBILITY SCHOLARSHIP

Jim Potton was the founder of the Envirothon Program in Manitoba in 1996. He had an unshakeable belief that the only way to respect our environment and cure its ails was through educating upcoming generations. To that end he tirelessly developed, promoted and organized the Manitoba Envirothon since its inception. This Environmental Responsibility Scholarship is a testament to his legacy of improving our environment through the intelligence, drive and commitment of our youth.

To qualify you must be a Grade 12 Manitoba student who is a member of a team competing in the current year's Manitoba Envirothon Provincial Event. Your school's accepted team registration is your confirmation to apply for this scholarship.

Application Forms are found on the Manitoba Forestry Association's Envirothon's Website: http://www.thinktrees.org/Default.aspx

Deadline for submission: two weeks before the Manitoba Provincial Envirothon begins. As this date will fluctuate please check the website or the current year application form for the deadline.

Content Requirements:

- 1,000 word essay detailing an environmental concern you have, how you feel it can be mitigated, and how you intend to use the scholarship funds to continue your education or otherwise enable your participation in the solution proposed.
- alternate submission form 250 word preface and either a video or PowerPoint presentation answering the details noted above.

Adjudication: Submissions will be reviewed by a panel of three individuals, one from the Potton Family Trust, one from the Envirothon Steering Committee and one with an environmental studies academic background.

Award Date: At the awards ceremony of the Manitoba Envirothon Provincial Competition in the year of application. Once we receive proof of enrollment in University or an accredited Secondary School you will receive the scholarship award.

Value: \$500.00

For further information, or an application form, please contact:

Manitoba Forestry Association 900 Corydon Avenue Winnipeg, Manitoba R3M 0Y4

Phone: (204) 453-3182



Attention: Glenn Peterson

Jim Potton Environmental Responsibility Scholarship

Please fill in the form and forward to the address below.

Applications must be received by May 12 of this year (2017) @ Manitoba Forestry Association, 900 Corydon Avenue, Winnipeg, Manitoba, R3M 0Y4

Address: _____ Home Phone: _____ Cell Phone: _____ Name and Address of the Post-Secondary school you plan to attend: Work Experience: Community Involvement: Activities & Interests: Jim wouldn't have been concerned about what career choice a student who won this award was making but rather how they used their inspiration from Envirothon to shape their thinking about the planet, in whatever field of study they chose to go into. Please tell us what career you hope to pursue and something that you will be taking with you from your time spent with Envirothon.