



# NW MICHIGAN HORTICULTURAL RESEARCH FOUNDATION

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**Special points of interest:**

- Don't miss the first Friends of the Foundation luncheon!!! We will be eating food grown by your neighbors.



## Horticultural Research Foundation Receives Major Gift from Smeltzer Orchard Company

Dr. Nikki Rothwell, District Horticulturist and NWMHRS Coordinator  
 Jeff Winegard, Fund Development Coordinator, Charity Resource Center

The Northwest Michigan Horticultural Research Foundation (NWMHRF) has announced a \$10,000 gift by the Smeltzer Orchard Company. Tim Brian, president of Smeltzer announced the commitment at a luncheon in Honor, Michigan.

“We are pleased to make this gift to NWMHRF’s endowment fund. Smeltzer Orchard Company recognizes the need for research that helps our growers compete in the world marketplace. We feel fortunate to contribute to the important work being conducted at the Research Station,” says Brian.

The Smeltzer Orchard Company has been a mainstay in Northern Michigan since 1872 when William Smeltzer planted one of the first orchards in the state. After seventy years as the premier grower and distributor of fresh fruit in the state of Michigan, Smeltzer Orchard Company began processing its own fruit harvests along with those of other area growers in



Nikki Rothwell, Station Coordinator and Rick Saylor, Treasurer of the Northwest Michigan Horticultural Foundation accept a \$10,000 check from Clinton Smeltzer, Director, and Tim Brian, President of the Smeltzer Orchard Company.

1946. This collaborative venture continues today and is centered in a modern facility that processes 40 to 45 million pounds of fruits annually. The facility includes 1,325,000 cubic feet of freezer storage and 430,000 cubic feet of cold storage. The company also has the ability to quick-freeze freshly processed fruits. Commodities handled by Smeltzer Orchard Company include cherries, cranberries, blueberries, apples and strawberries.

“We are pleased to accept this supportive gift from Smeltzer Orchard Company,” said Dr. Nikki Rothwell, the Research Station Coordinator. “This company has been a leader in the northwest Michigan fruit industry since its inception, and this generous donation is a terrific example of their commitment to the economic sustainability of fruit farming in our region.”

## A Banner Year in Connecting Citizens to the Cherry Industry: A Look at the 2007 Cherry Connection

Jennifer Berkey, Family and Consumer Science, MSU Extension  
 Dr. Nikki Rothwell, Station Coordinator, NWMHRS

Michigan State University Extension, the Northwest Michigan Horticultural Research Station, and the Cherry Marketing Institute work together each summer to place the “cherry” on top

of the National Cherry Festival. Since 1995, MSU Extension and the NWMHRS staff have treated National Cherry Festival participants to a five-day cherry promotion event at the

NWMHRS. The event combines Extension’s work in Family and Consumer Sciences, 4-H, the Michigan Groundwater Stewardship Program, and research and extension done through Agricul-

ture and Natural Resources. All of these groups come together to provide Cherry Festival goers with a behind the scenes look at the cherry industry.



## Cont. Connecting Citizens to the Cherry Industry



Cherry product display area in NWMHRS conference room.

The 2007 event reported a record crowd with more than 1,800 visitors! Cherry Connection participants could take a guided tour through the NWMHRS orchards and learn why the Grand Traverse/Leelanau region is the best area in which to grow cherries. MSU Extension educators share information about harvest procedures,


best practices for growing cherries, and the use of integrated pest management to help make cherries safer for the environment and for consumers.


The 4-H staff organized a petting zoo with animal care projects from 4-H youth. Family and Consumer Science staff provided participants with a delicious taste of local cherry products--jams, salsas, sausages, and breads were on hand to sample and cherry skin care products were available to try. This venue is also a chance for customers to learn about the health benefits of tart cherries.

The main goal of the Cherry Connection is to educate participants about the varied uses of cherries, introduce them to cherry production, and increase

sales of regional cherry products. We want Cherry Festival visitors to go home with a better understanding and appreciation of the cherry industry and all the growers' hard work and innovation.

A survey was distributed during the event to assess visitor satisfaction, examine areas for improvement, measure increase in knowledge about the cherry industry, and to see if the event would increase desire to purchase cherry products in the near future. The survey results showed the following:

 87% of participants said that they learned a new fact about cherries or a new use for cherries.

 92% of participants said that they plan to purchase cherry products in the future.

Congratulations to all for making the 2007 Cherry Connection a tremendous success!



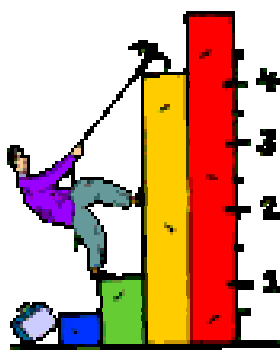
Kids enjoying the cherry poster contest.

## Goals of the NWMHRF Endowment Fund

Jeff Winegard, Fund Development Coordinator, Charity Resource Center

In 2006, the NWMHRF Board of Directors established an Endowment Fund aimed at ensuring long-term sustainability for the Research Station. Endowment funds are received from a donor with the restriction that the principal is not expendable. The donated funds are invested and only the income is used for the benefit of the NWMHRS.

We have begun a major endowment campaign, and in less than one year have raised



over \$47,000 in the fund. Our goal is to raise 1 million dollars

within the next five years. We calculate that an endowment fund of that size would generate approximately \$50,000 per year in income. These funds will make the research station less dependent on state and federal funding.

Donations of all types and sizes are accepted for the Endowment Fund, including honorary and memorial gifts, gifts of securities, gifts of farms, and bequests.

If you are interested in helping to establish a secure future for the ongoing work of the research station, please consider making a gift to our Endowment Fund. \*Contributions of any kind may simply be accompanied by a notation "Endowment Fund."

Please contact Jeff Winegard at [winegard@charter.net](mailto:winegard@charter.net) or (231) 348-8273 if you would like more information about the Endowment Fund."

## A Peek into the NWMHRS's History with George McManus

Dr. Nikki Rothwell, District Horticulturist and NWMHRS Coordinator

The Northwest Michigan Horticultural Research Station (NWMHRS) began as a dream for many area growers back in the late 1970's. At that time, much of the research around the state focused on apples, and although many growers produced apples in the northwest,

their specialty was cherries. The growers felt they needed a station that provided research for the growing cherry industry, and according to George McManus Jr., here is how the story was written....

Dr. Jim Anderson arrived at Michigan State University as the

new Dean of Agriculture and Natural Resources, and he wanted to learn about mechanical harvesting. He visited northwest Michigan during his first week on the job, and George hosted him on his trip north. The two of them stopped in at Bob Underwood's farm to check out the harvester.

On their way back to the car, Bob called out to Dr. Anderson, and told him what they really needed was a research station. The dean retorted, "Well then, build one."

George and Bob thought the dean might be onto something, but they knew if they were going

to build anything, they needed to convince Pete Morrison of this not-so-crazy research station idea. George hatched a 'payment plan' where growers would contribute to the cause based on the amount of their cherry acreage, so Bob and George packed up their payment checks and went to see Pete. Over a toddy, the three of these industry visionaries laid out their plan. George and Bob worked with industry organizations and leaders to establish the NW MI Horticulture Research Foundation. Pete took the lead in contacting some of the larger growers, processors, banks, and equipment dealers to obtain advanced gifts. Once they had some money in the foundation's pockets, they kicked off the industry-wide fund drive.

Nearly all NW Michigan growers embraced their idea and contributed to the fund drive. Plans were laid to purchase the Elmer Warner farm, but that land was not destined to become the NW Station. At the same time, Bob and Don Gregory were negotiating to purchase an 80-acre parcel across the road from Bob's house. When the foundation's

initial plans for property faltered, the Gregorys informed the board about the property. In the end, the Gregorys discontinued their negotiations in order for the board to pursue the purchase. With the blessing of Sylvan Wittwer, Director of the Michigan Agriculture Experiment Station, land was purchased in the fall of 1978 by the Northwest Michigan Horticultural Research Foundation. Here the Northwest Michigan Horticultural Research Station was born.

Ground was broken the following spring to begin construction of the building. Building construction costs were held to a minimum with donations of some materials and thanks to a significant contribution by the general contractor. By the end of the first summer, the building was dedicated and fields were ready to begin planting the following spring. And the rest they say is history.

Without the insight, determination, and support of George McManus Jr., the station would never have been built. George, a fourth-generation Grand Traverse County cherry farmer, began

his career in 1956 working as a marketing agent for MSU Extension. He covered a huge swath of the state, from Oceana County up to Emmet. After the retirement of Clarence Mullett, George became the Horticulture and Marketing agent, and then went on to take over for Art Glidden as the Grand Traverse County Extension Director, retiring from this position in 1981. Early on in his career, he organized grower tours throughout the U.S., and in 1971 he organized a grower trip to Europe. He felt that these trips helped build grower rapport that later helped bring them together to build the NWMHRS.

After retirement, George was elected to serve the people in the Michigan Senate, where he served through 2002. George chaired the Farming, Agribusiness and Food Systems Committee and was a member of the Senate Appropriations Committee. He served as chairperson of the Appropriation Subcommittees on agriculture and natural resources and was a member of the higher education, retirement and capital outlay subcommittees. He worked to pass

farmland taxation reforms and to establish zero interest loans for farm operations beset by drought and was the author of the Groundwater and Freshwater Protection Act.

George was a leader in efforts to establish both the Animal Industry Initiative at MSU, and the Plant Agriculture Initiative, now known as Project Green (Generating Research and Extension to meet Economic and Environmental Needs). While he held these posts, George was also instrumental in obtaining funding through the Michigan Department of Agriculture that would help support the NWMHRS. These monies have become invaluable to the station as they have built the conference room in fall of 1991, our office renovation in 2001, and the new pole building in 2006.

Obviously, George's accomplishments are many, but we would like to take a moment to recognize George and his wife Clara for their vision for the NWMHRS as well as for their continued support. Thank you George and Clara for all you have done for NWMHRS!

## Putting Some Science behind Stem-on Sweet Cherry Harvest

Dr. Dan Guyer, Dept. of Biosystems Engineering, MSU

Dr. Nikki Rothwell, District Horticulturist and NWMHRS Coordinator

Interest in harvesting stem-on sweet cherries is growing around northwest Michigan. Some processing companies are offering higher returns for cherries that enter receiving stations with their stems attached. This incentive is cause for growers to experiment with harvesting cherries in a way that stems remain intact. Another reason for the excitement about stem-on harvest is a newly named sweet cherry out of the New York breeding program. The 'Anderson' is a brine-type cherry that has shown some promise for this purpose; hence, it was named in 2006 after Dr. Bob Anderson of Cornell University. There is no recipe for

stem-on harvest, so growers have tried all kinds of methods and timings for removal this summer.

Another issue that has cropped up with harvesting sweets with stems on is how to obtain an accurate measurement for the amount of cherries in a tank when they arrive at the receiving station. The traditional method for determining the quantity of cherries in a tank of water is with an industry approved 'probe'. This probe measures the depth of the cherries in a tank of water, and this depth measurement is used in a formula that calculates the pounds of cherries in a particu-

lar tank. For sweet cherries, the depth measurement with the probe is multiplied by 43 to obtain pounds/tank. For tarts, the multiplier is slightly larger due to Montmorency's smaller size, and we use 47.45. If cherries are harvested with stems on, we wanted to determine if those probe measurements and multipliers provide accurate measurements for incoming tanks.



Summer research technicians, Kacie Scholl and Ele Nugent taking measurements at the Send receiving station.

With the support of Gray and Company, the objective of this summer's study was to provide the industry with a reliable, scientifically

tested method for determining correct amount of stem-on sweet cherries in the tanks when they arrive at the receiving station. We are looking forward to presenting you our results this January at the Northwest Michigan Orchard and Vineyard Show.

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*We're on the Web!*

*Visit us at:*

[www.nwmihort.org](http://www.nwmihort.org)



## Did you know that a horn-face bee stays on a flower longer than a honeybee?

Dr. Nikki Rothwell, District Horticulturist  
Karen Powers, Research Technician

For two seasons, the NWMHRS crew has been investigating the potential of horn-face bees (HFB) as alternative pollinators in cherries. Through these studies, we have found that HFB spend more time on a cherry blossom than honeybees (HB). In fact, HFB spent an average of 8 seconds longer on a blossom than HB in 2006 and 4 seconds longer in 2007!



**Horn-face bees (average±SE)**

2006: 12.2±0.33

2007: 10.9±0.8



**Honeybee (average±SE)**

4.2±0.07

6.7±0.4

This finding helps us better understand HFB biology, and it provides more insight into how efficient HFB may be in tree fruit systems. Insects that spend more time on a blossom are more likely to pollinate that fruit, and we know that we need 100 pollen grains to produce one cherry. Therefore, HFB may provide cherry blossoms with the appropriate number of pollen grains in one visit, and in turn, may produce more high quality cherries!