Northern Michigan FruitNet 2013
Northwest Michigan Horticultural Research Center

Weekly Update
October 22, 2013

CALENDAR OF EVENTS

2013

<table>
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<tr>
<th>Date</th>
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<th>Location</th>
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<tr>
<td>11/8-9</td>
<td>Wine Sensory Workshop</td>
<td>University Club, MSU</td>
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<td>11/12</td>
<td>Making It In Michigan Conference</td>
<td>Lansing Center, Lansing, MI</td>
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<td>12/10-13</td>
<td>Great Lakes Expo</td>
<td>Amway Grand Plaza, Grand Rapids, MI</td>
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2014

<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>1/14-15</td>
<td>NW Michigan Orchard &amp; Vineyard Show</td>
<td>Grand Traverse Resort</td>
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<td>2/18-19</td>
<td>IPM Academy</td>
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<td>2/24-26</td>
<td>Michigan Grape &amp; Wine Conference</td>
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MAJOR WEATHER CHANGES ON THE WAY DURING OCTOBER

After unseasonably warm temperatures during much of October this year, an extended period of cool and unsettled weather is likely.

Posted on October 17, 2013, MSUE News, by Jeff Andresen, Michigan State University Extension, Department of Geography

A persistent upper air ridging pattern across the Midwest during late September and early October of 2013 led to a prolonged period of mild weather and mostly favorable harvest conditions, with mean temperatures in Michigan since the beginning of the month running 4-6 degrees Fahrenheit above normal. During the past 24 hours, that upper air pattern has broken down and will eventually be replaced by a large troughing feature across the Great Lakes region (Figure 1). The trough will lead to northwesterly flow aloft and the passage of several Canadian-origin air masses into the central and eastern United States during the next week and possibly longer.

Figure 1. Forecast air flow between 18,000 and 19,000 feet above sea level Oct. 22-26, 2013. Solid green contour lines depict the general pressure pattern and with air flow parallel to the contours. The upper air troughing feature is the U-shaped pattern over the Midwest region. Figure courtesy of NOAA Climate Prediction Center

Collectively, this change suggests a prolonged period of cool, unsettled weather. While the potential influx of low level moisture from the Gulf of Mexico will be very limited with this pattern, the flow of cold air across the relatively warm waters of the Great Lakes (current water surface temperatures in Lake Superior generally range from the upper 40’s to mid 50s while those in Lakes Michigan and Huron range from the upper 50s to low 60s) will lead to a continuing threat
of lake effect precipitation. You will note that I used the term “precipitation.” Given that air
temperatures just above the surface will fall to near or slightly below freezing levels during the
next several days, it is likely that some of the precipitation across at least far northern sections
of the state will fall as snow, although no significant accumulations are expected. Lake effect
rain showers are likely elsewhere.

In the short term, look for cool, mostly cloudy conditions with a continuing chance for showers
each day through the weekend, Oct. 19-20. High temperatures will gradually fall back from
values in the 50s to low 60s Friday (Oct. 18) to the 40s by late this weekend. Low temperatures
will fall from the 40s Friday to the 30s by the weekend. Given subfreezing temperatures aloft, it
is possible that some locations could see freezing nighttime temperatures, especially if relatively
calm, clear conditions should develop; at this point, most nights are expected to be cloudy with
at least some wind. Freezing temperatures will be most likely across northern sections of the
state, although the threat will persist statewide through at least the middle of next week. Lake
effect showers will be a good bet each day, especially in northern and western sections of the
state. Rainfall totals in most cases are not expected to be heavy – generally less than 0.25
inches per day.

The NOAA Climate Prediction Center 6-10 day and 8-14 day outlooks, covering Oct. 22-26 and
Oct. 24-30 respectively, strongly reflect the upper air pattern described above and both call for
below normal mean temperatures and for above normal precipitation totals. Collectively, these
outlooks suggest slow grain drydown rates and prolonged harvest and fall fieldwork delays
during the next couple of weeks.

The new CPC 30-day outlook for November calls for further upper air pattern changes ahead
with equal chances of below, near and above normal mean temperatures and precipitation
totals for Michigan and the Great Lakes region. Further ahead, the outlooks call for milder than
normal mean temperatures for the November through January period with no forecast direction
on precipitation totals.

This article was published by Michigan State University Extension. For more information, visit
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888-MSUE4MI (888-678-3464).

SURVEY INDICATES SIGNIFICANT POSITIVE FINANCIAL RESULTS FROM LEASE
ROYALTY NEGOTIATIONS: Part 2

Attorney survey negotiations resulted in an average royalty increase of 33.6 percent per year.
This story is the second in a series.

Posted on October 18, 2013, MSUE News, by Curtis Talley Jr., Michigan State University
Extension

A recent Michigan State University Extension news article, “Oil and Gas Attorney Survey
Indicates Positive Financial Results from Lease Bonus Negotiations” stated that the average
initial bonus offer was $42 per acre and was increased to an average of $124 per acre by
attorney negotiations, an increase of 195 percent.
Each oil and gas lease contains a royalty clause that allocates to the landowner a portion of the income produced as a result of the extraction of hydrocarbons. Economically, it is the most important term of the lease. Royalties can vary greatly from lease to lease, so it should receive close attention by landowners.

During the summer of 2013, a survey was mailed to oil and gas attorneys that represent private landowners. The survey measured oil and gas lease terms “before negotiations” and “after negotiations” to determine what, if any financial or environmentally related lease terms were negotiated to benefit their clients.

**Oil and gas lease royalty**

The survey found that 100 percent of the attorneys reported the initial royalty offer was 1/8 (.125). As a result of negotiations, the average royalty increased to 1/6 (.167), an increase of 33.6 percent. All attorneys except one reported that on some leases, the royalty was increased to 3/16 (.188), an increase of 50 percent depending on the location of the land and the demand in the lease market for the mineral rights in that area.

To demonstrate the financial impact of the royalty, we can use an example oil well. For this example, we will assume the landowner is the sole owner of 40 acres and a successful well is drilled that produces 25 barrels per day. It operates for 200 days during the year and the oil sells for $90 per barrel. This well will produce $450,000 in gross income (25 barrels/day x 200 days x $90/barrel = $450,000) in the first year.

Alt 1: .125 (1/8) royalty produces $56,250 ($450,000 x .125 = $56,250) for the landowner.

Alt 2: .167 (1/6) royalty produces $75,150/yr. ($450,000 x .167 = $75,150) for the landowner.

By negotiating a royalty increase to .167, in this example, the income is increased $18,800 in the first year, or 33.4 percent. It is important to note that this increase lasts the entire term of the lease, so there is a compounding effect.

For more information about oil and gas leasing, visit the Michigan State University Extension Oil and Gas website to view additional resources such as Landowner Information for Oil and Gas Leasing, a free downloadable resource that provides information to assist mineral owners in understanding oil and gas leases in layman’s terms as well as knowing their options in negotiating changes that put the agreement in line with their financial and environmental goals.

*This article is the second in a series to discuss the results of this survey. Future articles include:*

- Post production costs negotiation results
- When negotiations were not successful, what did the landowner do?
- Environmental and land use negotiation results

Other stories in this series:
• **Oil and Gas Attorney Survey Indicates Positive Financial Results from Lease Bonus Negotiations: Part 1**

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**WEBSITES OF INTEREST**

Insect and disease predictive information is available at:

[http://enviroweather.msu.edu/homeMap.php](http://enviroweather.msu.edu/homeMap.php)

This issue and past issues of the weekly FruitNet report are posted on our website

[http://agbioresearch.msu.edu/nwmihort/faxnet.htm](http://agbioresearch.msu.edu/nwmihort/faxnet.htm)

60 Hour Forecast


Information on cherries is available at the new cherry website:

[http://www.cherries.msu.edu/](http://www.cherries.msu.edu/)

**Fruit CAT Alert Reports has moved to MSU News**    [http://news.msue.msu.edu](http://news.msue.msu.edu)

**Tart Cherry Raw Product Reports – 2013**

[http://www.cherryboard.org/Week82013.pdf](http://www.cherryboard.org/Week82013.pdf)