Highmoor Farm Field Day
Thursday, July 21, 2011. 8:30 AM to 3:30 PM
52 U.S. Route 202, Monmouth, ME
Registration (lunch) fee: $15.00. No pre-registration required.

The Maine Pomological Society and the Maine Vegetable & Small Fruit Growers Association will be joining with the Maine Agricultural & Forest Experiment Station and the University of Maine Cooperative Extension to hold a public field day at Highmoor Farm in Monmouth on Thursday, July 21, 2011.

The day will start with visitor registration and coffee at 8:30 a.m. The Maine State Pomological Society will hold its business meeting at 9:00 a.m., followed by a speakers program beginning at 9:30 a.m. which will include a discussion of marketing using social media outlets and employment law for farmers hiring workers. Concurrently, there will be a morning tour of the vegetable and berry research plots.

A catered lunch will be served at 12:15 p.m., during which there will be informal greetings and updates from state officials.

At 1:00 p.m. there will be a tour of the orchards and current tree fruit research plots, and the vegetable and berry research tour will be repeated.

Growers are welcome to attend the whole day, or may come for just the morning or afternoon programs and tours. Whichever you decide, please plan to be there for lunch to share some time and informal discussion with fellow farmers, research and Extension staff and state officials. Cost for registration (including lunch) will be $15.00. We hope to see you there!
Directions

**Traveling North on I-95:** Drive north on the Maine Turnpike (I-95) and take the Sabbatus exit (Exit 86). Travel about 2 miles, then turn left onto Route 132. After 4.5 miles, turn left onto Leeds Junction Road. Travel about 2.8 miles, then turn right onto Route 202 and travel about 1.3 miles up the road until you see Highmoor Farm on the right side.

**Traveling South on I-95:** Take Exit 109B in Augusta. Continue west on U.S. Route 202 and travel about 15 miles. Highmoor Farm will be on the left.

Persons with a disability who need accommodations for this program should contact Pam St. Peter at 933-2100 or call 1-800-287-8957 to discuss their needs at least 7 days in advance.

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**Apple maggot**

Apple maggot trap captures remain at or near zero in most monitored blocks. But a couple of locations have gone over threshold. If you have traps, go by what you find on the traps. If you don’t have traps you should have protection in place by now.

Respray guidelines for apple maggot control are online at [http://pronewengland.org/AllModels/MEmodel/me-Sanford-AMJuly.htm](http://pronewengland.org/AllModels/MEmodel/me-Sanford-AMJuly.htm) & [http://pronewengland.org/AllModels/MEmodel/me-Monmouth-AMJuly.htm](http://pronewengland.org/AllModels/MEmodel/me-Monmouth-AMJuly.htm)

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**European red mite**

With this hot, dry weather I would have expected otherwise, but European red mites have only popped up in a few Maine locations so far this year. Frequent checking is important. At these temperatures, ERM can go through a half-generation cycle with dramatic population increase in as little as 4 days.

If you find living hatched mites on more than 77% of middle aged leaves, or more than an average of 5 mites per leaf, then a summer rescue treatment with Acramite, Kanemite, Nexter, Portal and Zeal is recommended.

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**Fire Blight**

Fire blight strikes have appeared in at least three locations that I know of. In one backyard case, a whole tree is going to be removed after the tree went from no visible symptoms on July 1 to extensive dieback by July 5.
Numerous new individual strikes have been found in two commercial orchards since July 10, but as far as I know these situation are still contained to removal of those strikes, not loss of entire trees.

The text below is excerpted from a 2004 article in the NY Scaffolds newsletter. It is still valid advice for dealing with summer fire blight strikes.

"MANAGING FIRE BLIGHT AFTER BLOOM"
(Dave Rosenberger & Bill Turechek, Plant Pathology, Highland and Geneva)

The first step for minimizing shoot blight damage involves pruning out infected limbs as soon as symptoms are detected and before extensive necrosis develops. Failure to do so increases the likelihood that blight will continue to spread both to adjacent trees and into the rootstocks of affected trees (rootstock blight). Pruning out infections in mature trees may not be practical, but mature trees with a full crop will set terminal shoot buds earlier than young trees. When trees set terminal buds, blight stops spreading, both between trees and within the affected trees. In order to remove strikes before cankers extend too far into the tree, trees must be examined at least two or three times weekly until the epidemic begins to slow. In sections where trees are severely affected, it may be more cost-effective to immediately remove entire trees, especially if trees are a susceptible cultivar like Gala. Pulling out badly affected trees will allow blight removal crews to focus their efforts on trees that can be salvaged.

Occasionally we see orchards where no streptomycin was applied and blossom blight infections are so abundant as to make selective removal of infected limbs impractical. When this occurs with mature apple trees, it is often best to just walk away from the orchard and allow the disease to take its course, then remove cankers and dead wood during winter pruning. An exception would be cases where blighted older orchards are adjacent to younger blocks of highly susceptible cultivars: In that case, the older trees should be pruned or removed to minimize spread into the young orchard. With pears and young apple trees, infections should always be pruned out, even if that means removing nearly all of the tree canopy.

When pruning out fire blight strikes, cuts should be made at least 12 inches below symptoms. The effectiveness of sterilizing pruning shears between cuts is debatable, and is often not done due to the impracticality. The late Dr. Paul Steiner has shown that disinfecting pruning tools is a waste of time because minute cankers often form on the ends of cuts even when pruning shears are disinfected. Instead of wasting time disinfecting pruning tools, Paul recommended making all cuts into at least 2-year-old wood where bacteria will be less able to multiply. Also, leave "ugly stubs" by cutting branches between nodes and at least several inches away from the central leader. Small cankers that form on these stubs can then be removed during winter pruning, whereas a canker that forms at a flush cut on the central leader will be missed during winter pruning. In the ideal world, blight removal would only be done in dry weather. If rain is predicted during the period of pruning, one must weigh the risks of spreading blight by pruning in wet weather versus the risks of giving the epidemic a full week, or even a two- or three-day head start. With highly susceptible cultivars like Gala, it is probably best to remove blight as quickly as possible, even if that means that some removal would be done in less than ideal weather.

In orchards with fire blight, growers should implement management practices that promote early cessation of tree growth. In a year with only light to moderate rainfall, withholding irrigation and delaying orchard mowing (so that the ground cover competes with trees for water) can help to shut down tree growth. No additional nitrogen fertilizers should be applied in orchards with active fire blight. Allowing trees to carry a heavier-than-normal crop can also help to slow vegetative growth and reduce further spread of fire blight.

Streptomycin sprays should NOT be applied during summer because summer applications will result in rapid development of streptomycin-resistant strains of the blight pathogen. The only exception is that streptomycin should be applied immediately after any hailstorm if there is active blight in the orchard (i.e., orchards where blight was present this year and terminal shoots are still growing). Apogee, a plant growth regulator, can help to decrease the severity of shoot blight if the first Apogee application is made during bloom, but Apogee applications are ineffective for blight control if the first spray is
applied only after the first blight symptoms appear. Copper applications during summer have not proven effective and may cause unacceptable fruit russetting.

Hand thinning or bud pinching while blight is active in the orchard should be avoided until after terminal bud set. Delaying hand thinning may result in some loss of fruit size, but risks of spreading blight outweigh the benefits of early hand-thinning. At least one grower has demonstrated that pinching buds as part of tree training for the vertical axe system is a great way to spread blight. Even though we no longer recommend disinfecting pruning tools between cuts, one can still spread blight on one's fingers while pinching buds (and presumably while hand-thinning). Pinching is done to succulent shoot tips that are highly susceptible to blight, whereas cuts made to remove blight are made in wood that is at least two years old.

Trauma events (hail, high winds) can put any orchard block at risk because varieties that are considered relatively resistant to blossom blight and shoot blight can develop severe blight if inoculum is blown in from adjacent susceptible varieties. If a trauma event occurs when trees are actively growing, streptomycin should be applied as soon as possible (within 4 hours is best) after the trauma so as to limit the incidence of trauma blight. After midsummer, when trees have hardened off for the season, streptomycin protection following trauma events may be unnecessary because trees are fairly resistant to fire blight after tree growth stops for the season. Applications of streptomycin may not be possible after midsummer anyway because of the days-to-harvest limitations on the label.”

Flyspeck

The only real news is that I was recently informed by a researcher that the percentage of fruit showing successful colonization by flyspeck fungi (after incubation in warm moist conditions after fruit were collected) can go down after periods of hot dry summer weather.

This is not to suggest you can ignore the risk of flyspeck infection, but to me at least it does suggest the possibility of stretching spray intervals to match the need for apple maggot insecticide coverage even if your fungicide coverage is getting beyond the optimum respray interval suggested for continuous summer protection against flyspeck infection. For those suggested intervals, see the Orchard Radar tables at http://pronewengland.org/AllModels/MEmodel/RADARME-sanford.htm#flyspeck & http://pronewengland.org/AllModels/MEmodel/RADARME-monmouth.htm#flyspeck

Flyspeck is a complex disease, but in terms of control it seems that on well-pruned trees you almost have to ignore it to get into trouble. The flip side of that is that if you ignore it, you can get into trouble! Especially on late harvested cultivars. Boosting summer half rate captan application with Topsin M (at 3 – 5 ozs./100 gals. Dilute), or with a phosphite fungicide at full dose, will upgrade efficacy of coverage from Fair to Good. “Fair” efficacy translates to 14 days or 1.5 inches of rain, and “Good” efficacy allows for longer intervals of 21 days or 2 inches of rain.

The most important fungicide application for preventing fliespek is to make the final application as late as possible given your constraints on opening dates for PYO and other harvest activity. A final application of Pristine in mid- to late August is the gold standard for preventing flyspeck. This will provide control for 25 days or 2.5 inches of rain. The later you postpone the end of flyspeck prevention, the less time new infections beginning after prevention ends have to develop before harvest. With a final Pristine application on August 20, even if we have unusually warm and wet weather following that application, it is unlikely that
fliespeck will have time to develop before Columbus Day weekend. With earlier final application dates, or with final applications made with other fungicides, that safe harvest window ends earlier.

**Apple mealybug**

Apple mealybug (*Phenacoccus aceris*) (AMB) is not a common pest in Maine orchards. In fact, until this year I had only seen it one Maine orchard in 2004. It feeds like related pests such as San Jose scale, and green/spirea/Woolly apple aphids. The primary damage caused by AMB is honeydew excrement falling on fruit leading to growth of sooty mold. In heavily infested trees, a high percentage of fruit can be rendered unfit for sale. AMB has a wide host range that includes all deciduous fruit and nut trees, small fruits, and many shade trees. There is one generation per year, with summer generation egg hatch in Maine most likely beginning in late June – early July.

There is a gallery of AMB images at [http://jenny.tfrec.wsu.edu/opm/gallery.php?pn=135](http://jenny.tfrec.wsu.edu/opm/gallery.php?pn=135)

AMB reappeared as a problem in that Maine orchard in 2010. The orchard had not received prebloom oil, and because of frost damage, did not receive any Sevin (carbaryl) application for thinning. Thus, it seemed that apple mealybug was a latent pest usually kept in check by carbaryl and/or prebloom applications, and that in orchards receiving these applications, AMB would continue to be a no show.

However, despite use of prebloom oil and carbaryl in that orchard this year, AMB has returned as a problem in that orchard. Even with a carryover population the previous year, I expected that the use of prebloom oil and carbaryl would have suppressed AMB below a noticeable level, but that has not been the case.

It is also worth noting that signs of apple mealybug infestation have been found in two other Maine orchards this spring. These new finds were in orchards far distant from the first orchard. I do not know the spray history in the third orchard, but in the other two Maine orchards with noticeable AMB, frequent use of pyrethroid insecticides in 2010 is suspected as a contributing cause for the AMB population increase.

AMB was a pest in Nova Scotia and British Columbia in the 1930s, but was subsequently brought under control by the parasitoid wasps such as *Allotropus utilis*, and by lady beetles, lacewings, and other generalist predators. My best guess is that this pest will continue to be a rare find in Maine orchards, but will remain as a secondary pest that can reach pest status where frequent use of pyrethroid insecticide interrupts natural control. While providing relatively inexpensive broad spectrum control of plum curculio, codling moth, apple maggot and other primary insect pests; pyrethroids are also be lethal to beneficial parasitoids and predators. Thus, pyrethroids can release European red mites, twospotted spider mites, leafminers, apple aphid, woolly apple aphid, AMB, and other pests from otherwise effective natural control.

Prebloom oil applied earlier in the prebloom period may suffocate overwintered nymphs before they become active. The optimum timing for insecticidal control of AMB is at crawler
emergence, which has already passed for this summer. For future reference, you can monitor timing by wrapping carpet tape (stick on both sides), or black or white duct tape with Tangletrap added, around branches near egg cases and signs of infestation from the previous year. These monitoring stations should be in place by mid-June.

Where AMB becomes a problem, control is needed more immediately that what a disturbed natural control species complex will be able to provide. AMB is not a common pest in other apple growing regions either, so there is not much field experience with control options for this particular species. WA State Extension notes that materials effective against grape mealybug should also be effective against AMB. This includes Assail, Calypso, Provado, and Centaur, Imidan and Guthion. (Note however that Imidan was used after Petal Fall in the Maine orchard that currently has AMB.)

Cornell does not have insecticide efficacy ratings for AMB, but the following materials are rated effective against Comstock mealybug, a related pest species (PHI in parentheses): Assail (7), Calypso (30), Actara (35), Provado (7), Centaur (14), Movento, Portal (14), and Diazinon (21 days - AG600 and 50W only)

Of the options listed for Comstock mealybug above, Assail and Calypso also provide good apple maggot control. Diazinon no longer lists apple maggot on the label, but was previously known as an effective AM material. Diazinon has a 4 day REI. Portal provides effective miticide activity.

If AMB becomes a problem in an organic orchard, WA State Extension notes that neem insecticides (Azadirachtin, Aza-Direct, Neemix) applied at crawler emergence can provide some control.

The bottom line however is that AMB is a rare pest that can be avoided entirely by limiting summer use of pyrethroid insecticides.

**Leafminer**

The optimum sample dates in Sanford to check for leafminer sapfeeding mines (visible as light colored patches on the undersides of leaves) are July 19, 24 and August 5. The equivalent dates in the Monmouth area are July 26, August 2, and August 15. Leafminer populations earlier this season were extremely low, making problems with second generation unlikely. However, populations can increase dramatically between generations, so it is worth checking while the mines are still young enough for insecticidal control if needed. Once visible on the top sides of leaves, chemical control is not effective.
Leaf and Soil Samples

Instructions for Collecting Leaf and Soil Samples

Leaf Samples
1. Samples should contain leaves from only one variety. Different varieties should be sampled separately, if possible. Mid to late July is ideal for collection of leaves.

2. Take a random sample from throughout the orchard. Select trees in good health that are typical of the orchard in tree size, age, crop load and vigor. Do not take leaves from sick trees. Avoid yellow leaves on Honeycrisp.

3. Collect 50 to 100 leaves from this year’s shoot growth. Pick leaves that are midway down the shoot. Avoid leaves from shaded parts of the canopy or that are yellowing from stress.

4. Ideal block size is 10 acres or smaller. However, larger areas can be sampled if tree age, crop load, weed control and soil fertility are the same from one end to the other.

5. Place leaves in plastic bags to keep them from drying out. They will be washed with a solution that removes surface contaminants. Place the plastic bag inside paper bags that are labeled with the orchard name, your mailing address, block name, and variety. Premade labels are available from the Highmoor Farm (207) 933-2100.

Soil samples
1. The soil should be a composite or mixture of 15 separate samplings scattered over each block. Each block should be uniform in weed control, soil texture, fertility and past soil management.

2. Use a sampling tube, augur or spade. Take the soil from within the tree row and to a depth of 8 inches.

3. Place the composite sample in a container and mix thoroughly. Transfer soil to the Soil Testing Box and fill it fully. Boxes are available from the Highmoor Farm.

4. Label the box with the orchard name, block name and your phone number or address.

Each leaf or soil sample must be accompanied by the Plant and Soil Analytical Lab form (see below). This information is used for your fertilizer recommendation. If leaves and soil are sampled from the same block, only one form is needed.

Leaf and soil samples can be brought directly to Highmoor Farm, the Soil Testing Lab in Orono, or mailed to:
Highmoor Farm
PO Box 179
Monmouth, ME 04259.
### Plant and Soil Analytical Lab

**Orchard Leaf Sample and Soil Sample Information Form**

**Highmoor Farm:** (207) 933-2100  
**Analytical Lab:** (207) 581-2917

**Lab Use Only:**

<table>
<thead>
<tr>
<th>Leaf Sample no.</th>
<th>Topsoil sample no.</th>
<th>Subsoil sample no.</th>
</tr>
</thead>
</table>

Grower Name:  
Mailing Address:  
Daytime phone:  
Sample or block name:  
Soil Classification (if known):  
Variety or strain (indicate if spur or standard):  
Average tree age:  
Average tree spacing or no. trees per acre:

<table>
<thead>
<tr>
<th><strong>Crop load</strong></th>
<th><strong>Pruning</strong></th>
<th><strong>Ground cover</strong></th>
<th><strong>Soil drainage</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>light</td>
<td>light</td>
<td>sod</td>
<td>good</td>
</tr>
<tr>
<td>moderate</td>
<td>moderate</td>
<td>mulch</td>
<td>fair</td>
</tr>
<tr>
<td>heavy</td>
<td>heavy</td>
<td>herbicide</td>
<td>poor</td>
</tr>
</tbody>
</table>

#### Fertilizer and foliar sprays (check all that you applied):

<table>
<thead>
<tr>
<th>Nitrogen (grade and lbs. per tree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foliar urea</td>
</tr>
<tr>
<td>Lime</td>
</tr>
<tr>
<td>Magnesium</td>
</tr>
<tr>
<td>Boron (ground or foliar)</td>
</tr>
<tr>
<td>Manganese</td>
</tr>
<tr>
<td>Zinc</td>
</tr>
<tr>
<td>Copper sprays</td>
</tr>
</tbody>
</table>

#### Check or list any problems:

- Biennial bearing  
- Bitter pit  
- Shoot dieback  
- Lack of fruit color  
- Interverinal chlorosis  
- Foliar injury (specify):  
- Other
Other stuff

1. Wild Turkey Damage Survey

“Wild turkey populations are expanding in Maine and there have been concerns from farmers about wild turkeys on their fields. Researchers at the University of Maine at Augusta are investigating the effects of wild turkeys on various agricultural landscapes in Maine. All farmers and gardeners in Maine are invited to participate in this research by completing a brief on-line survey.

http://www.surveymonkey.com/s/MaineTurkeys

The objectives of this survey are to understand the attitudes and concerns of Maine farmers and gardeners regarding wild turkeys. This voluntary survey should take only 5 minutes and participants may skip any question they do not wish to answer. Previous studies have found surveys of agricultural producers to be very beneficial to identifying the issues and to guide research and management decisions regarding wildlife. We believe this project will produce valuable and practical information for the agricultural community in our state.

If you have any questions or concerns, please feel free to contact me at any time.”
Christopher Lage, Ph.D.
Assistant Professor of Biology
University of Maine at Augusta
clage@maine.edu

2. Weigh It Before You Spray It

The following text is from a Penn State fact sheet online at http://extension.psu.edu/plant-disease-factsheets/all-fact-sheets/weighing-pesticides

“Wettable powder pesticide labels list the amount to use in terms of pounds per 100 gallons. When lesser amounts are to be mixed, growers, homeowners, and even university personnel frequently follow the old rule of thumb that 1 lb/100 gal = 1 tablespoon/gal. This rule of thumb is inaccurate, costly, and hazardous to crop health. The physical properties of wettable powders from various sources can differ considerably.

For example:
1 ounce of Brand X Captan 80WP = 2.4 tablespoons
1 ounce of Brand Y Captan 80W = 5.2 tablespoons

Using weight, 1 LB/100 gives a concentration equal to 0.16 oz per gallon:
1 tablespoon of Brand X Captan 80WP would make a 0.42 oz per gallon mix
1 tablespoon of Brand Y Captan 80W would make a 0.19 oz per gallon mix

In other words, 1 tablespoon per gal of Brand X Captan 80WP would be equal to more than 2 LB/100 gal and 1 tablespoon Brand Y Captan 80W would be slightly more than 1 LB/100 gal.

The lesson is clear, weigh it before you spray it. Considering the cost of pesticides, accuracy can save money. Considering the damage that can be done by pesticide overdoses, accuracy can save crops. Purchase a weighing scale. Even a good letter scale will work well.”
3. When is too hot for field work?

In addition to the daily high temperature forecast, another useful number is to look at is the dew point temperature. This is the temperature below which water vapor in the air will condense on skin and other surfaces. The closer the dew point temperature gets to body temperature, the greater degree to which moisture in the air interferes with the human body’s sweat mechanism to dissipate heat.

You can find forecast dew point temperatures at 12 hour intervals on the 8-day forecast for Maine sites at [http://www.nws.noaa.gov/mdl/forecast/text/state/ME.MRF.htm](http://www.nws.noaa.gov/mdl/forecast/text/state/ME.MRF.htm).

You can find a more detailed forecast at 3 hour intervals for the next 3 days at [http://www.nws.noaa.gov/mdl/forecast/text/state/ME.AVN.htm](http://www.nws.noaa.gov/mdl/forecast/text/state/ME.AVN.htm).


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“Many times, relative humidity can be misleading. For example, a temperature of 30 and a dew point of 30 will give you a relative humidity of 100%, but a temperature of 80 and a dew point of 60 will only give you a relative humidity of 50%. It would feel much more "humid" on the 80 degree day with 50% relative humidity than on the 30 degree day with a 100% relative humidity. This is because of the higher dew point. The higher the dew point, the muggier it will feel. “

General comfort levels that can be expected during the summer months:

<table>
<thead>
<tr>
<th>Dew point</th>
<th>Comfort level</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 55</td>
<td>Dry and comfortable</td>
</tr>
<tr>
<td>55 – 65</td>
<td>Becoming a bit &quot;sticky&quot; with muggy evenings</td>
</tr>
<tr>
<td>&gt; 65</td>
<td>Lots of moisture in the air, becoming oppressive</td>
</tr>
</tbody>
</table>

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Dew points >70 are quite uncomfortable, some sources rate dew points above 70 F as “intolerable”. When temperatures are above 85 F and relative humidity is above 60%, then dew points reach or exceed 70F and there is risk of sunstroke, heat cramps, and/or heat exhaustion for outdoor workers. And this assumes shade or cloud cover and light wind. In full sun, substantially lower temperatures can result in heat risk.

4. Lo – o – o – ng term temperature outlook

The following tidbits from a review of climate change predictions in “The Kennebec Estuary: Restoration Challenges And Opportunities”, by Slade Moore & Jaret Reblin, Bowdoin College, August 2010. This publication is online at [http://kennebecestuary.org/resources/state-of-the-kennebec-estuary](http://kennebecestuary.org/resources/state-of-the-kennebec-estuary).

Winter temperatures:

For the graphs below, extrapolating the midpoint of these ranges for comparison to the 1970-2000 average values may not be technically accurate. This is because the climatic shifts are expressed as mean seasonal temperature changes, not specifically changes in January daily lows or July daily highs. The graphs use January daily low and July daily high temperatures as familiar reference points to aid in interpreting how climatic shifts might affect growing conditions for apple production in Maine.
In the northeastern United States, winter temperatures have increased at a rate of 0.7°F per decade since 1970. Continuing that trend from 2010 to 2039, average winter temperature in the northeastern United States is predicted to increase 2.5–4°F.

If greenhouse gas emissions are not curbed, then for 2040–2069 under a lower-emission scenario, winter temperatures in the northeastern U.S. are estimated to increase 4–5 °F. Extending out from 2070 to 2099, under the lower-emission scenario, winter temperatures are estimated to increase 5–8°F.

Under a higher-emission scenario, for 2040–2069 temperatures are estimated to increase 4–7°F in winter. And for the higher emissions scenario for 2070 to 2099, winter temperature increase is expected to be 8–12°F.
**Summer temperatures:**

Northeastern U.S. summer temperatures have increased at 0.5°F per decade from 1970-2000. Continuing that trend from 2010 to 2039, average summer temperature in the northeastern United States is predicted to increase 1.8–3.4°F.

If greenhouse gas emissions are not curbed, then for 2040–2069 under the lower-emission scenario, summer temperatures in the northeastern U.S. are estimated to increase 2–5°F. Extending out from 2070 to 2099, under the lower-emission scenario, summer temperatures are estimated to increase 3–7°F.

Under the higher-emission scenario, summer temperature 2040–2069 increase 4–8°F. Under the higher-emission scenario, summer temperature increase for 2070 to 2099 is estimated at 6–14°F.
For another comparison, the current 30 year average May 1 daily high temperatures in central CT is 6°F warmer than at Highmoor Farm in Monmouth ME. The average McIntosh Full Bloom date in central CT is 15 days earlier than in Monmouth ME, May 7 vs. May 22.

Maine’s steep climate gradient exists within just 3 degrees of latitude—a similar gradient in Western Europe spans 20 degrees. Because of this latitudinal compactness, there is high likelihood for dramatic ecosystem change across small geographic distances in Maine due to even small climate shifts.

Closing Words

“Love is to the heart what the summer is to the farmer's year - it brings to harvest all the loveliest flowers of the soul.”

-- Author Unknown

Where brand names are used it is for the reader’s information. No endorsement is implied nor is any discrimination intended against products with similar ingredients. Always consult product label for rates, application instructions, and safety precautions. Users of these products assume all associated risks.

Orchard Radar weather and pest tracking models at http://pronewengland.org/AllModels/DecisionModels.htm

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http://pmo.umext.maine.edu/apple/  

Dr. Renae Moran  
Extension Tree Fruit Specialist  
Email: rmoran@maine.edu  
Voice: 207-933-2100 ext 105  
Highmoor Farm Ag. Exp. Station, P.O. Box 179  
Monmouth ME 04259-0179  
http://extension.umaine.edu/agriculture/programs/tree-fruits/

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