

As days are getting longer and February draws to an end, the remaining days of winter weather are waning. So far, it's been an incredibly mild winter, except for a few weeks in January. In fact, several of the winters in the recent past have been significantly warmer than average. Many people may wonder how warmer winters can affect trees and wildlife.

For example, the effects of a warmer winter on trees can include:

1. A lack of prolonged cold temperatures and deep frost can reduce insect pest mortality, potentially leading to higher pest populations in subsequent years. In order to mitigate potential pest issues, it is important to monitor your most valuable trees and consult with an arborist about specific plant health care needs if you notice any potential concerns.
2. Extended warm-ups while the ground remains frozen can cause damage to coniferous trees known as winter burn. This happens when the air is warm and the canopy of the tree tries to transpire water, but the roots are not able to obtain any with the ground being frozen. This leads to browning of the needles, especially in areas exposed to direct sunlight, and can even kill young or newly planted trees. In order to minimize the chances of winter burn damage to your conifers, you should:
 - a. Avoid planting conifers late in the fall.
 - b. Thoroughly water all newly planted conifers until the ground freezes to establish strong root growth.
 - c. Install mulch 3-4" thick around young conifers to maintain good soil moisture and reduce root exposure to freezing air temperatures.
3. Similar to winter burn, warm winters and early springs may induce early bud break on some deciduous tree species. This can be problematic if we get heavy frosts after bud break since fresh bud tissues are very delicate. In most cases, damage is minimal. In rare cases, this can lead to severe decline or even tree mortality.
4. Warm winters or cool, wet springs can create an environment favorable for fungal growth. Fungi are some of the most prevalent tree pests we have in our area, including oak wilt, rhizosphaera needle cast in spruces, rust diseases in fruit trees, tar spot in maples, along with many others. The good news is many fungal diseases are treatable if caught early, so it is again important to monitor your trees and consult an arborist for specific plant health care needs.

With regards to wildlife, the most significant impacts of a warmer winter may include:

1. Migratory birds may head north earlier than normal. This can be problematic, especially if winter weather returns, because:
 - a. Snow and frozen soil can significantly limit food availability.
 - b. Freezing temperatures can be dangerous to non-resident birds.
 - c. Unpredictable late winter weather can affect a bird's natural breeding cycle.
2. Bats may emerge from hibernation too early when there are not enough insects for them to eat.
3. Lack of snow cover can be dangerous to certain amphibians since they rely on it to insulate them from heavy frost during hibernation.

While a warmer winter is not all bad, it is good to know some of the effects it may have in the upcoming seasons. On a positive note, we are fortunate to live in an ecologically diverse region that, as a whole, can tolerate wide ranges of weather activity.