



COUNCIL ON ENVIRONMENTAL QUALITY

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DATE: October 22, 2012

TO: Council Members

FROM: Karl Wagener
Executive Director

RE: Evaluating Connecticut's Response to Invasive Species

The Council published "Great Infestations" ten years ago. That report contributed to a successful legislative effort to create the Invasive Plants Council and other legal tools. I reviewed the recommendations of that 2002 report and assessed the extent to which they have been implemented; my assessment is attached. Aside from the specific recommendations, I found two statements in the report to be of special interest:

"The second biggest threat to Connecticut's natural environment is invasion by alien plants and animals. (The top threat is loss of habitat to sprawling land development.) With few natural enemies, these species grow, spread, and multiply so fast they can transform healthy ecosystems into weed-choked woodlands and waterways in just a few years. Worse, many of our native plants and animals are deprived of light, nutrients and ultimately their continued existence. Collectively, invasive species are a silent but serious environmental problem for which Connecticut is not prepared."

That was true in 2002 and is true today, though I question whether invasive species are the second biggest threat to Connecticut's natural environment. They might be the *biggest* threat. Later this year, we hope to have new information on the extent of sprawl in recent years. In any event, recent research shows that development and invasives go hand-in-hand, as the presence of invasive species is highly correlated with nearby residential development.

"Eradication of widespread invasive species from natural habitats is not a realistic goal for the foreseeable future. Connecticut's priorities should be to prevent new infestations and to control the spread of the most harmful species into sensitive areas."

It is even more apparent today: many species are beyond any hope of eradication. The state's emphasis must be on early detection and response. As the attached assessment shows, the state is not responding adequately.

Summary: Areas of the state are overrun with invasive species. Private and public landowners spend millions of dollars to control them, though the money is often not noted explicitly by the spenders to be for control of invasive species. (It is for control of weeds in lakes, vines in trees, thorny shrubs (barberry) in woodlands, etc.). Invasive species costs us in other ways as well, such as worsening the power outages during storms as trees weakened and weighted down by invasive vines fall too easily. Given the status of invasive species as our greatest ecological threat and their cost to our pocketbooks, it is remarkable that the state has not put in place a commensurate response to keep the problem from getting significantly worse. No other environmental threat – air pollution, water pollution, water diversion – is addressed through such a diffuse assemblage of responsibilities and unfunded authorities; those other environmental threats are the focus of specific management programs. With the exception of an invasive species coordinator who works for the University of Connecticut, everyone working on the problem does so as a component of their larger state responsibilities or as a volunteer. It will not be possible to contain invasive species if as a state we do not commit sufficient resources.

Attachment

2012 Assessment of Progress Toward the CEQ's Recommendations of 2002

Blue = 2002 Text from "Great Infestations."

Red = 2012 Status Update (10/22/12)

RECOMMENDATIONS

SETTING PRIORITIES

Eradication of widespread invasive species from natural habitats is not a realistic goal for the foreseeable future. Connecticut's priorities should be to prevent new infestations and to control the spread of the most harmful species into sensitive areas. The Council recommends the following six specific steps:

RAPID RESPONSE TO NEW INVASIONS

1. Connecticut must develop an effective capability for rapid response to NEW reports of harmful infestations, both on public and private lands. This team, which could be coordinated by any number of agencies, must have resources on hand (much like chemical emergency response teams) and legal authority to take immediate action.

2012: The state's record is mixed.

- State agencies (DEEP, CAES) have the legal authority to respond to insect invasions, as they demonstrated with the firewood quarantine put in place when the Emerald Ash Borer was discovered in 2012. (Regrettably, this is only a containment strategy and the ash trees of Connecticut's forests are, barring an unexpected intervention or scientific triumph, almost certainly doomed.)
- State agencies (CAES, DEEP, DoAg) have the authority to respond to reports of invasives in commerce, including seeds.
- When an invasive aquatic infestation is discovered on private property, the state is not always able to respond. When the property-owner is resistant to action, then the prospects are not good. When the property owner is cooperative, the state sometimes has nothing to offer for assistance. Both situations are ongoing.
- Response to some species has been ad hoc; attempts to eradicate early reports of Mile-a-Minute depended on volunteers and, while heroic, were inadequate.
- No species has been knocked out upon its discovery in Connecticut. [Still verifying this.] Work is ongoing to eradicate the sole known remaining infestation of Yellow Floating Heart in a private pond. (State resources are being deployed there because hope still exists for stopping the species.)
- DEEP is working on an early detection and response policy for aquatic invasive species for publication in 2013.

Explanation: The opportunity to stop a species occurs when it grows in only one or two places in the state. When Water Chestnut was discovered in two locations, the DEP responded with a combination of staff time (as it was available from other projects), volunteers, and small grant funds. Though not yet eradicated, the colonies are getting smaller. When it was discovered in a third place, the DEP did not respond because the plant was growing in a private pond – even though the landowner sought help. Why wait for the seeds to be dispersed by waterfowl into more waterways before taking action?

2012: The Water Chestnut infestations in the Connecticut River have been reduced through manual pulling. The original infestation in the Hockanum River persists. The plant has been discovered in privately-owned ponds.

PLAN THE CAMPAIGN

2. The DEP should be provided authority and funds to prepare a comprehensive plan, within one year, that would define priorities for battling invasive species. This plan, with references to specific species and means of control, should define priorities for both state and private lands.

2012: A state plan for aquatic nuisance species was published in 2006. There is no similar plan for terrestrial species.

Also, when the DEP acquires land, it should assess the threat from invasive species and how that threat can best be managed. (This recommendation should not be allowed to slow the DEP's efforts to save outstanding lands from the number one threat, which is misplaced development.) **DEEP staff does incorporate invasive species control into its management plans.**

Explanation: Many species will never be eradicated from Connecticut's fields and forests, and would be low priority for control. However, those same species could be ecological nightmares in designated natural areas. A plan would help the state assess what needs to be done and when.

PREVENT ACCIDENTS

3. Improve information campaigns to prevent the spread of species that are introduced accidentally. The Governor and General Assembly should require the DEP to create information campaigns about preventing the spread of species that are introduced accidentally. Connecticut will need to work with regional bodies to better control species that "hitchhike" on boats and plant pots. An informed public will be essential.

2012: DEEP has a campaign to inform boaters and to urge them to inspect their boats and motors for invasive species before transporting them, which also is the law now. There is no similar campaign for terrestrial species.

PUT SOMEBODY IN CHARGE

4. The Connecticut Invasive Plant Working Group has organized itself to discuss the problems of invasive species and work cooperatively toward solutions. This body, representing numerous agencies and organizations as well as private companies, is a commendable example of cooperative work in the sphere of public policy. To the extent state government can further the work and status of this body, it should do so.

2012: Again, the record is mixed:

- The Invasive Plants Council was created by statute (see below) to determine which species should be prohibited from commerce and transportation.
- The Connecticut Invasive Plant Working Group works harder than ever, but has no official status.
- Responsibility for inspection of nurseries, garden stores, pet shops and other establishments is distributed among several agencies (CAES, DEEP, DoAg), as is inspection of water bodies (CAES, DEEP). The same is true for enforcement (to its limited extent) and education.

PHASE OUT THE REPEAT OFFENDERS

5. Discourage the spread of invasive species already established.

The eradication of some invasive species is a challenge almost hopeless. Nonetheless, it would be a mistake, ecologically and economically, to encourage their spread into areas not currently infested. There is no sound reason to continue spreading and planting these species, as there are non-invasive substitutes for virtually all of these plants. With ample warning, the horticultural industry should be able to switch from the invasive to the safe.

The Council recommends the following four specific actions to help control the spread of species that are already established in Connecticut:

A. The Governor and General Assembly should assign one agency with responsibility for informing the public about the dangers of invasive species, and appropriate adequate funds. This publicity program should include annual surveys to measure the campaign's effectiveness. The goal of the campaign should be to have Connecticut residents purchasing non-invasive plants instead of invasive ones.

2012: Several state and federal agencies work to inform the public through posters, websites, booths at garden shows, symposia, lectures, flyers, etc. To date, these efforts have had the benefit of providing guidance to the concerned consumer, but they leave the unconcerned uninformed.

B. The responsible agency should work closely with the horticultural industries on plans to inform the public.

2012: There have been cooperative efforts on posters and other efforts; see immediately above.

C. The Governor and/or General Assembly should direct all state agencies to 1) refrain from planting any species on the list of invasive species prepared by the DEP, and 2) insert into all construction and maintenance contracts and economic development grants a standard provision that prohibits use of state funds for the planting of any species on the DEP's list.

2012: Improvement: CGS 22a-381c prohibits state agencies from buying invasive species. Also, some regulated projects, such as utility lines approved by the Siting Council, include provisions for controlling invasive species.

KEEP DANGEROUS SPECIES OUT

6. Prevent deliberate introductions of dangerous species by discouraging their sales. This pertains to species not yet established widely in Connecticut, and in which no Connecticut grower has a significant investment. For these, **the Council recommends establishment of a list of species that by mutual agreement should never be sold, transported, or grown in Connecticut.** These are the plants so harmful that they should be regarded as biological pollution; their escape should be prevented in the same way particularly harmful chemicals are prohibited. The horticultural industry has expressed a strong opposition to statutory prohibitions on any specific plants, citing the potential spread of such an important precedent. Voluntary controls could be effective, but there must be a governmental agency, such as the Connecticut Agricultural Experiment Station, that ultimately must decide on the composition of the list. Instead of naming any species in statute, **the Council offers this recommendation (for species that are not yet widespread):**

The General Assembly should adopt a statute with the following provisions: A body with official status should be directed to work with the horticultural industries to develop a plan to prevent the sale, culture and transport of the most harmful species, with special reference to those species that are not yet widespread in Connecticut. It will be difficult to achieve universal consensus on individual species, excepting a few very harmful species having limited economic investment, so this panel will have to be constructed and/or appointed carefully. It could be an existing body, such as the Connecticut Agricultural Experiment Station, the University of Connecticut, or a designated subcommittee of the Connecticut Invasive Plant Working Group. This plan would rely on voluntary removal of dangerous invasives from the marketplace, with no penalty provisions. However, this plan **must** include a provision for annual inspection and monitoring. Once a list is established, defining the species which the industry associations pledge to not sell, personnel would have to inspect points of sale around the state. If this cooperative approach is found to be effective, then no legal prohibitions would be necessary.

2012: The Invasive Plants Council was created by statute in 2003 with this mission (approximately). The sale and transport of many plant species are now prohibited. Inspection is occasional. Many violations have been detected; violators are informed of the law.

Also, to help in the discovery of new invasive species in the wild, the University of Connecticut should continue implementation of its innovative, grant-funded Invasive Plant Atlas of New England (IPANE).

2012: IPANE still exists, which is an excellent resource for the scientist or motivated consumer.

Addendum

The long version of the 2002 report states that “[Japanese Barberry] can be found growing in front of the headquarters of the DEP and Council on Environmental Quality.”

2012: It's gone!