Exotic Invasive Plants

Non-native invasive plants reduce native plant diversity and can alter natural ecosystem processes. Oriental bittersweet is an especially insidious plant species because it can establish in shade, then "sit and wait" for an opportunity to climb into the forest canopy, overtopping and girdling mature trees. Scientists at the Bent Creek Experimental Forest are conducting research on the distribution of oriental bittersweet vines, seed dispersal by animals, and characteristics that aid in its establishment under the forest canopy.





Our results show that:

- Most oriental bittersweet seeds are dispersed.
- Seedlings can establish in dense shade.
- Plants grow rapidly when exposed to high light conditions.
- Bittersweet cover decreases native plant diversity.
- Abundance is negatively associated with elevation and distance from Asheville.
- Control strategies should focus on minimizing seed dispersal.

We are also comparing seed dispersal of native plants versus exotic invasive plants that produce fleshy fruit.

Contact: Cathryn H. Greenberg or Henry McNab