



New Honeysuckle Removal Methods Being Researched By NGRECC

by Dalton Brown, News Reporter
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ALTON - Jacob Decker, Addis Moore, and Dr. Justin Shew with the National Great Rivers Research and Education Center (NGRECC) discussed their research into honeysuckle removal methods and more on [an episode of Our Daily Show! on Riverbender.com](#).

Decker and Moore are both interns for NGRECC, and both presented their research at the 59th annual meeting of the Illinois Chapter of the Wildlife Society (ICTWS) in Champaign last April.

Moore said his research has centered around finding an effective way to combat honeysuckle. The most effective method he's found so far is injection with a "lance," or a four-foot-long pole, filled with capsules of chemicals meant to kill honeysuckle without affecting any native plants.

"What we've found so far in my study is that the areas that we've injected the honeysuckle and killed them, there's higher plant diversity and species richness in those areas," Moore said. "More native plants are growing there's going to be higher biodiversity, which in turn, would lead to more animal diversity also."

For his experiment, 10 plots with 40 subplots were set up in the woods near Lewis & Clark and given different treatments - some were injected, some weren't, and some were "seeded" with a native seed mix. Moore said his injection method has proven quite effective against 75% of the honeysuckle.

"The winter injection and fall seeding subplot, the combination of those two together, seems to be the best at restoring the natural habitat so far," he said. "75% of the honeysuckle that we injected is completely dead, no growth, but 25% of it ... they have

a little, tiny green growth that comes out of their bark, and so we have to consider it alive.”

Moore added they’re currently in the process of collecting more data and should soon have enough to write a paper about their findings.

Decker’s research also involved honeysuckle, but looked at the effects of aerial spraying (from helicopters or airplanes) on wildlife management in certain areas. This partially included collecting Mass Vegetation Index data, a process that used to require lots of time and manpower combing through fields for honeysuckle - until Decker discovered a tool which sped up the process significantly.

That tool is [Google Earth Engine](#), which Decker described as a “free online program that utilizes geospatial and satellite imagery.” He said honeysuckle has an “extended leaf phenology” which causes it to stay green even as other leaves change color in the fall, making it easy to spot - especially in overhead satellite imagery on Google Earth Engine.

“For the amount of data we needed to collect for my first project, it took about 10 people across a whole year of time,” Decker said. “I got the same kind of numbers, correlation, and the same plots within a month just by myself using this program.”

Dr. Shew added that NGRECC is associated with Lewis & Clark Community College and offers new year-long internships, which allow for more thorough education than the summer-long internships offered previously. To learn more about NGRECC, visit ngrecc.org.

The full interview with Decker, Moore, and Dr. Shew can be watched at the top of this story or on Riverbender.com/video.

