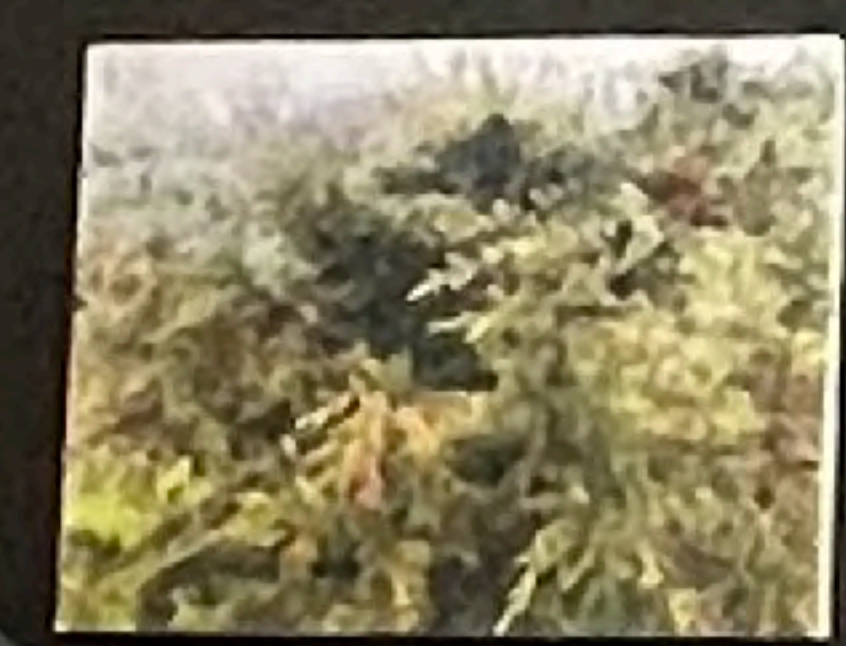
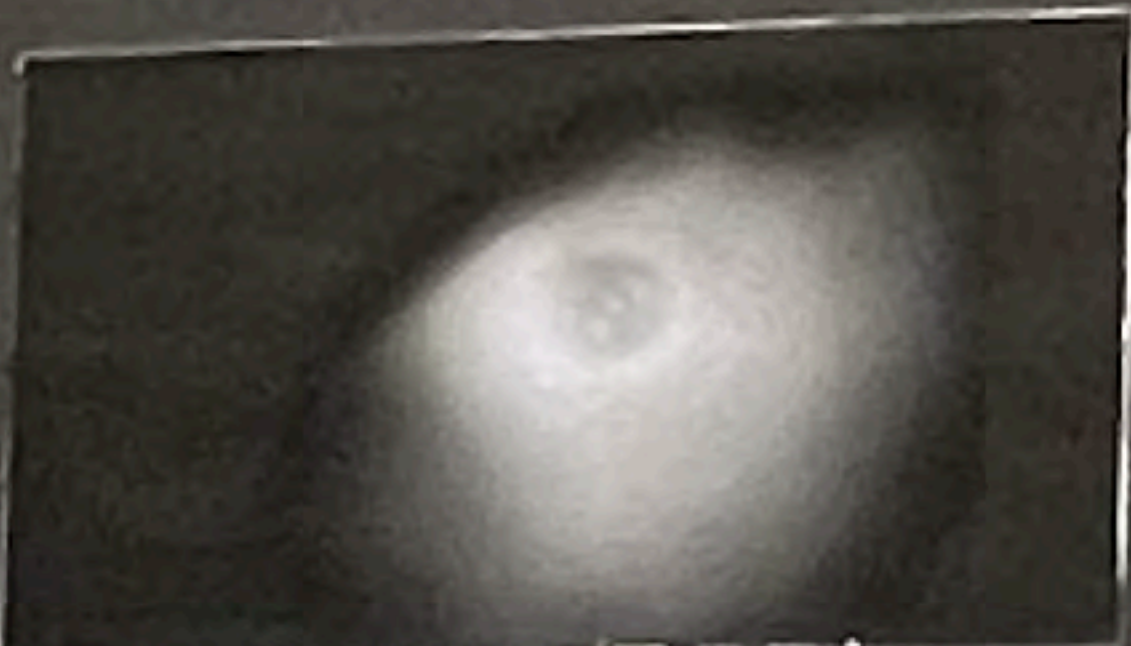
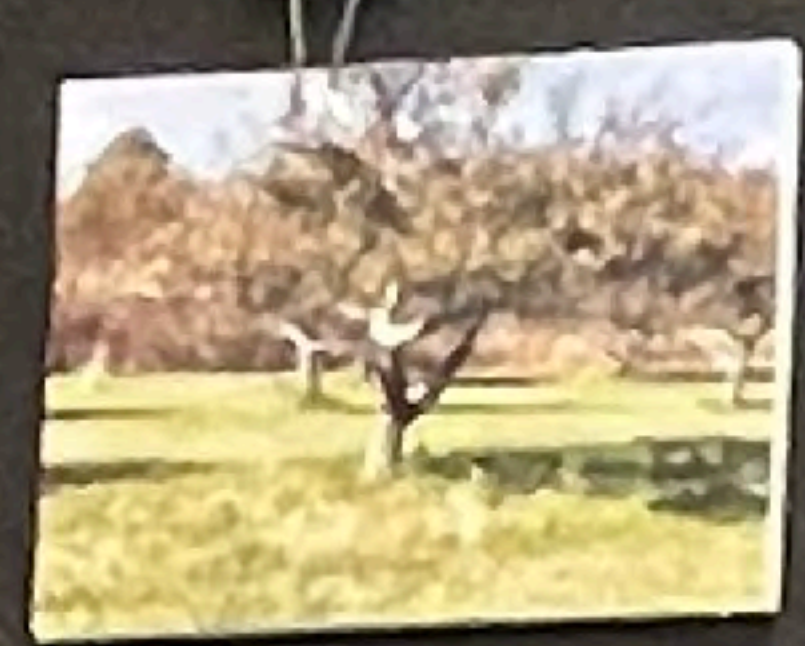


**Agro-Forestry Based Control for Cedar
Apple Rust Disease and Deer Browsing in
Organic Apple Orchards** SARE FNC20-1277

Presenter: Dan Kelly Owner of Blue Heron Orchard Canton, Missouri
Background: Planted a five-acre apple orchard in northeast Missouri in 1990 which is the first certified organic orchard in the state. This is his third SARE grant related to organic apple production. In 2010 received a VAPG for organic processing into raw markets, and a Sustainability grant from the Missouri Department of Agriculture for creating a commercial straw-bale apple storage structure.



PROFICIAL SYNERGY: Improved income and profitability
To harvest six-foot mature Eastern Red Cedar trees (Symoparganum barkeri-virginianum) for posts to create an eight foot fence and deter deer and raccoons from entering the orchard. Deer especially damage newly planted trees and browse the tree's fruiting buds in winter and summer often killing the Eastern cedar trees in proximity to apple orchards. Both mammals eat the apple crop. Cedar trees are symbiotic and can negatively impact susceptible apple trees varieties by hosting the Cedar Apple Rust (CAR) disease. Cutting down and utilizing the cedar trees for eight-foot fence posts will reduce the possibility of CAR to infect apple trees and restrict entry into the orchard.

