

**NJS Presents****The 2018 NJ History and Historic Preservation Conference****Poster Session Winner, Undergraduate Category*****Ringwood Mines Superfund Site:******Implications for Local Flora and Fauna*****By Barbra Walker****DOI: <http://dx.doi.org/10.14713/njs.v4i2.141>**

*Barbra Walker's poster, "Ringwood Mines Superfund Site: Implications for Local Flora and Fauna," won the undergraduate poster contest at the 2018 New Jersey History and Historic Preservation Conference. The conference was held June 7-8 at Passaic County Community College in Paterson, NJ.*

Ford Motor Company has been responsible for grave environmental injustices against residents of Hillburn, NY; Mahwah, NJ; and Ringwood, NJ throughout the mid to late '60s. Our focus of study is upon the Native American community that resides within Ringwood. Because of toxic materials buried among woodland areas of Ringwood, there are now a multitude of carcinogenic elements shown to exist within the local flora and fauna. Ramapough Native Americans residing in Ringwood have relied upon their local plants and animals for sustenance and ceremonial practices. They hunt and consume game animals (deer, turkey, rabbit and squirrel), harvest vegetation for consumption and ceremonies (sage, sweetgrass, wild carrot), and perform ceremonies within a vegetative environment. Reports conclusively prove that contamination exposure pathways connect contaminants to soil to vegetation to herbivores to carnivores and omnivores (including humans).

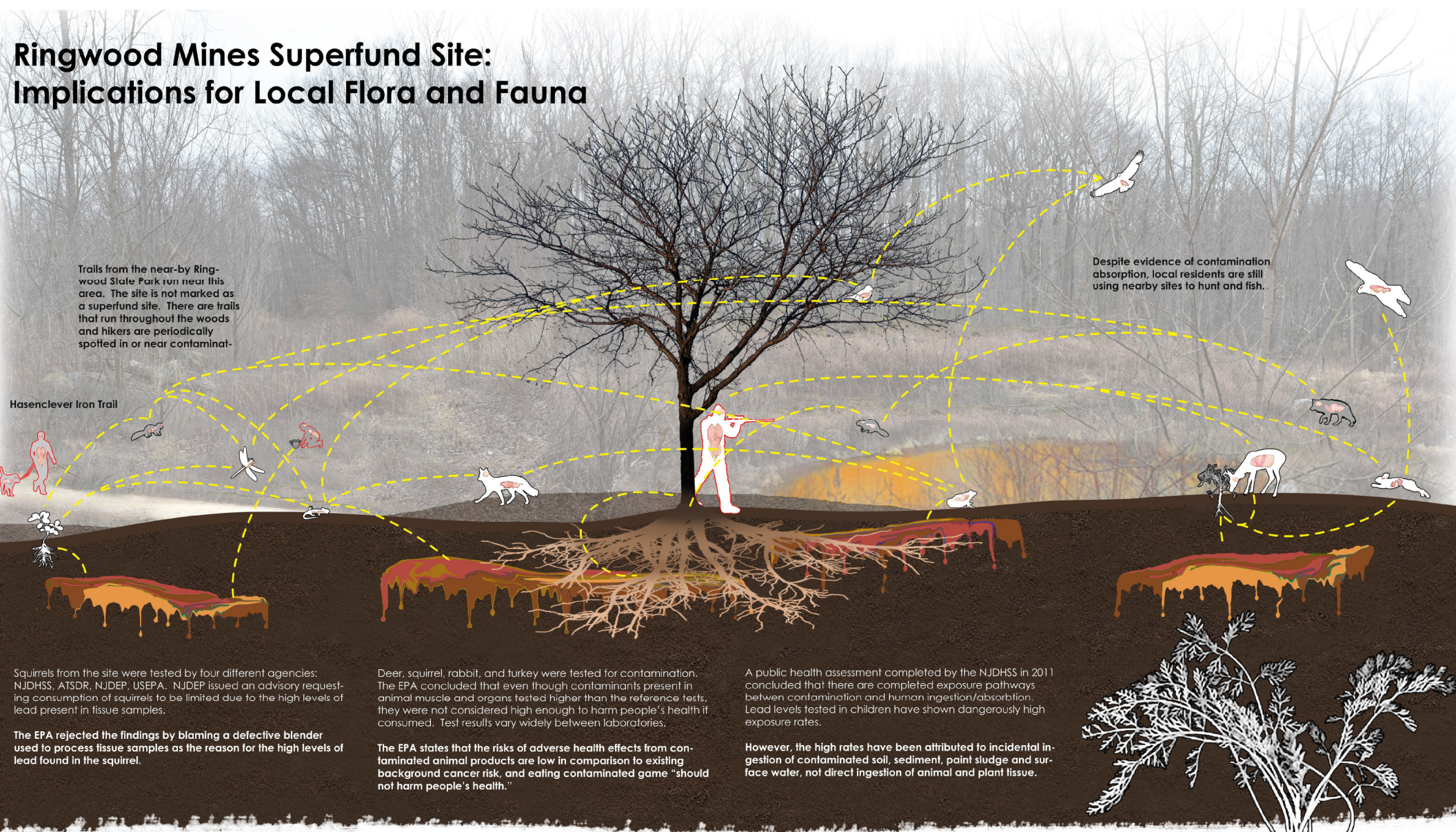
Because of the exposure to Ringwood community members, cancers, skin disorders and

gastrointestinal diseases are disproportionately high. However, proving this direct causal relationship between contamination and illnesses is a very difficult thing to accomplish. Government agencies and private NGOs have amassed proof of their existence and the existence of this linkage. However, the EPA has acted as the resident “bad guy” by denouncing, in some form or other, the validity of the reports. In essence, the EPA is acknowledging a contamination issue existing within upper Ringwood while ignoring the much larger issue: people are getting sick because of existing contamination, and that contamination is being absorbed largely through the usage and consumption of their local flora and fauna.

*Barbra Walker is a recent graduate of the Landscape Architecture program at Rutgers University's School of Environmental and Biological Sciences. Her interests range from environmental justice issues (such as the Ringwood Superfund Site) to built landscapes within urban communities. She believes that if everyone has equal access to properly functioning ecological systems, even something as simple as a rooftop garden, we can bridge the growing gap between the individual and the community by bringing people together through environmental stewardship.*



# Ringwood Mines Superfund Site: Implications for Local Flora and Fauna



Trails from the near-by Ringwood State Park run near this area. The site is not marked as a superfund site. There are trails that run throughout the woods and hikers are periodically spotted in or near contaminat-

Despite evidence of contamination absorption, local residents are still using nearby sites to hunt and fish.

Hasenclever Iron Trail

Squirrels from the site were tested by four different agencies: NJDHSS, ATSDR, NJDEP, USEPA. NJDEP issued an advisory requesting consumption of squirrels to be limited due to the high levels of lead present in tissue samples.

The EPA rejected the findings by blaming a defective blender used to process tissue samples as the reason for the high levels of lead found in the squirrel.

Deer, squirrel, rabbit, and turkey were tested for contamination. The EPA concluded that even though contaminants present in animal muscle and organs tested higher than the reference tests, they were not considered high enough to harm people's health if consumed. Test results vary widely between laboratories.

The EPA states that the risks of adverse health effects from contaminated animal products are low in comparison to existing background cancer risk, and eating contaminated game "should not harm people's health."

A public health assessment completed by the NJDHSS in 2011 concluded that there are completed exposure pathways between contamination and human ingestion/absorption. Lead levels tested in children have shown dangerously high exposure rates.

However, the high rates have been attributed to incidental ingestion of contaminated soil, sediment, paint sludge and surface water, not direct ingestion of animal and plant tissue.

**Abstract:**  
Ford Motor Company has been responsible for a grave environmental injustices against residents of Hillburn, NY; Mahwah, NJ and Ringwood, NJ throughout the mid to late '60s. Our focus of study is upon the Native American community that resides within Ringwood. Because of toxic materials buried among woodland areas of Ringwood, there are now a multitude of carcinogenic elements shown to exist within the local flora and fauna. Ramapough Native Americans residing in Ringwood have relied upon their local plants and animals for sustenance and ceremonies. They hunt and consume game animals (deer, turkey, rabbit and squirrel), harvest vegetation for consumption and ceremonies (sweetgrass, sage, wild carrot), and perform ceremonies in a vegetative environment. Reports conclusively prove that contamination exposure pathways connect soil to vegetation to herbivore to carnivore and omnivore (including humans).

Because of the exposure to Ringwood community members, cancers and gastrointestinal diseases are disproportionately high. However, proving the direct causal relationship between the illnesses and existing contamination is a very difficult thing to accomplish. Government agencies and private NGOs have stepped in to amass proof of their existence and the existence of this linkage. However, the EPA has acted as the resident "bad guy" by denouncing, in some form or other, the validity of the reports. In essence, the EPA is acknowledging a contamination issue existing within Ringwood while ignoring the much larger issue: people are getting sick because of existing contamination, and that contamination is being absorbed largely through the usage and consumption of local flora and fauna.

Wild carrots from three different contamination sites were tested for metals and synthetic organic chemicals by the USEPA and NJDEP. Even though tests showed lead levels many times higher than in the control tests, the tests were determined inconclusive because the amount of lead found in the carrots collected at contamination sites did not correlate to the low levels of lead found in the soil. They claimed the differing amounts cast doubts on the accuracy of the reference area and site data.

The organizations cannot say conclusively whether consuming wild carrot, a staple of the Ramapough diet, will cause harm to people's health.

