

ILLINOIS NATURE PRESERVES COMMISSION
Meeting Minutes

Lincoln Library
Carnegie North Room
326 S 7th St
Springfield, IL 62701

April 11, 2024, 1:00 PM

Item 1: Meeting Purpose and Logistics

Todd Strole, Assistant Director
Illinois Department of Natural Resources

Todd Strole provided opening remarks on the purpose and logistics of the meeting.

Item 2: Call to Order, Roll Call Introductions

Commission Chair Derby Lewis called the meeting to order at 1:09pm and read the roll call.

Commissioners Present: Dr. Abigail Derby Lewis, Michelle Parker, Radhika Miraglia, Robert Szafoni, Toni Oplt, Tom Clay, Marcella DeMauro-Roth and Adam Kessel (George Covington attended via WebEx)

Consultants Present: Amy Doll, Joe Roth, Bill McClain, Kim Erndt-Pitcher, Alan Branhagen, Cynthia Kanner, Fran Harty, Dr. David Thomas

Others Present: Todd Strole, Kim Roman, Sami Childerson, Heather McLean, John Nelson, Claire Gregory, Kelly Neal, John Griesbaum, Valerie Njapa, Emily Taylor, Kaleb Baker, Lorraine Foelske and Byron Paulsen, INPC; Heather Osborn, Chris Young, Michelle Bloomquist, Ann Holtrop, Beth Whetsell, Carson McNamara, Paula Martel, John Rogner, Leon Hinz IDNR; Eliot Clay, Illinois Environmental Council; Kevin Rohling, Illinois Extension Forestry; Brooke Morgan, Illinois State Museum; Jeff Brethmans, Illinios Forestry Association; Cassie Carroll, Smart Energy Design Assistance Center; Brad Beaver, Illinois Department of Agriculture; David Zaya and TJ Benson, Illinois Natural History Survey; Corey Lacey, Illinois Soy Association; Ed, Price, Greg Richard, Justin Irlam, Michael Murphy, Tara Beveroth, University of Illinois; Marty Kemper, Maggie Bruns, Robert Hirschfeld, Prairie Rivers Network; Marc Miller, Prairie Research Institute; Jim Johannsen, Jo Daviess Conservation Foundation; Michael Hawthorne, Chicago Tribune; Patsy Hirsch, Friends of Illinois Nature Preserves; Jen Malacarne, Carol Soderholm, Paul Soderholm, Public;

Item 3: INHS Herbicide Drift Reporting

TJ Benson and David Zaya, INHS, presented on this item - see Attachment 1

Commissioner DeMauro-Roth referenced how in the beginning of the presentation; the presenters expected to see more Dicamba. As it turns out, the research showed other chemicals showing up in different concentrations. She asked the presenters to comment on observations versus expectations. She indicated that additionally, most of the information the Commissioners have received has been focused on Dicamba. Is this a factor of what is being used in the surrounding areas?

TJ Benson began his answer by noting that the Dicamba issue is what brought this to most people's attention. After talking to people, including producers, they know the use of Dicamba has decreased. Most of this use has been replaced with 2,4-D in particular. 2,4-D is known to have volatility issues in certain forms. In addition, there are concerns about the sheer amount of chemicals being put out during any given period. Atrazine, while the number two chemical detected, often comes as a surprise to people in terms of its prevalence.

Commission Chair Derby Lewis asked about a statistic presented - 97% of all sites had a presence of pesticide. What was the percentage of INPC sites with pesticide?

David Zaya answered that the number is in the very high 90s. There might have been a maximum of three sites without pesticides.

Commission Chair Derby Lewis continued, wondering why there were not soil samples taken in the second set of site visits. She noted that Dicamba only has a half-life of 14 days in leaves and was curious if the reporting of Dicamba injury had missed windows of opportunity to record the chemical presence.

David Zaya responded that Dicamba degrades quickly, so it cannot be ruled out that it was there. They didn't detect it in June, but it cannot be ruled out that it was present.

TJ Benson noted there is a lot that is unknown about half-lives. They also don't know a lot about native species and whether they degrade the chemicals faster.

Commission Chair Derby Lewis asked why they did not do additional soil samples, as it does stay longer in the soil.

TJ Benson replied, stating the soil sampling was an add on. They took a decent amount of soil samples, around 60, and the results did not yield much. Running the tests on the soil samples is also very costly. While it's good that they didn't find Dicamba in the soil, it did help contextualize findings of the chemical on leaves. It indicates that the chemical is coming down and landing on the leaves rather than coming up through the soil systemically.

Commissioner DeMauro-Roth noted she was struck by the 50% variability in INPC sites and asked the researchers what they think accounts for that level of variability?

David Zaya replied when you think of INPC sites, it is often a beautiful contiguous forest or grassland, or small gap along a railroad. Therefore, you have extremes in exposure.

Commissioner DeMauro-Roth clarified that this related to the perimeter of the sites.

Consultant Bill McClain noted that his biggest concern with herbicide is the physiological effects of the chemical on the plants. Are they being stored in woody tissue, inhibiting growth and so on? Are there plans to research these concerns?

TJ Benson said the short answer is that they don't know about the persistence or level of damage occurring. They do know that plants have evolved from a lot of types of damage and can recover, but don't know if they are able to recover from this or are able to move past it. This was the purpose of marking trees, to measure the changes over time and discern if there are any lasting impacts.

David Thomas asked about the earliest time these herbicides are being applied.

TJ Benson replied that he did not have all the answers on this. He knows some are applied before planting for weed management. He would guess late April based on his knowledge.

David Thomas continued, noting it seems to be when oaks are beginning to flower, and a lot of migrating insects are coming through. Several things are happening in this period which can expand impact across species.

TJ Benson agreed and said there might be some big phenology components such as oaks leafing out sooner and overlap with changes in other species. The question would be whether this is more noticeable now because of phenology changes. The oak genus in particular is important for certain moth caterpillars, which is a food source for birds so there's a lot of potential for overlap in impact.

Commission Chair Derby Lewis noted experts from the Department of Agriculture were in the room who may be able to provide specific information on the timing of herbicide application.

Brad Beaver replied that early application begins in early April as the weather changes.

Consultant Kim Erndt-Pitcher asked about the level of quantification used.

David Zaya replied they ranged from 10 to 50 parts per billion, depending on the chemical. So, .01 to .05 mg per kilogram.

Consultant Kim Erndt-Pitcher asked if they've noticed an increased rate of decline in the last decade.

David Zaya answered that oaks have been declining but he didn't know off the top of his head the rate of increased decline. He has seen a decline in AMF (arbuscular mycorrhizal fungi root symbiont) plants. They have attributed that to garlic mustard, but these results now cause him to consider looking elsewhere.

TJ Benson continued to say that they certainly have the data to show some plants are more vulnerable and some sites are declining more rapidly than others.

Consultant Amy Doll noted the researchers' plan to go back to sites and marked trees for additional data. She asked if we need to study this problem for an additional 20 years to know if we need to make some changes.

TJ Benson answered this is the reason they chose to study sites they have previously studied to show long term changes in the data. For example, tree mortality takes a long time to document. They'll be able to make conclusions from the 25 years of data already collected.

Consultant Amy Doll asked about the extent of future research planned to illustrate this problem.

TJ Benson replied that the hope is to continue to go back to these sites and answer these questions. This is obviously an issue, and they want to collect data to answer questions.

Consultant Kim Erndt-Pitcher asked if there are plans to revisit these sites and take additional tissue samples.

TJ Benson replied that they have funds built into the current fiscal year to return to sites to rule out any idiosyncratic findings and show consistency.

Commissioner Miraglia appreciated the follow-up questions that were listed, particularly about the impacts of these chemicals. She was surprised by the number of unknowns and lack of knowledge to answer some of the questions. She asked if this is being studied in other areas of the world. As part of the process of registering these chemicals for use, are there any requirements to study their risks for collateral damage?

TJ Benson replied that they're interested in continuing the research and answering those questions. He noted there is a risk assessment in registering these chemicals that uses the best available knowledge. This is done with model systems to identify those problems, but it's limited. To his knowledge, there are no other studies being done at this scale.

Commission Chair Derby Lewis thanked the presenters. She announced the intent to propose two resolutions for adoption by the Commission.

This first resolution is for basic acknowledgement of what we knew a year and a half ago and what we've seen bolstered with today's data. The resolution would be:

It was moved by Commission Chair Derby Lewis, seconded by Commissioner Parker, and carried to resolve that the Commission acknowledges the trespass of chemicals onto nature preserves causing damage to plant life is a violation of the Natural Areas Preservation Act.

(Resolution 2630)

Commission Chair Derby Lewis continued to the second resolution about next steps. She proposed to resolve that the Commission requests INPC staff work with State agencies on potential next steps to pursue policy and/or legal action.

Commissioner DeMauro-Roth stated she understands the intent but indicated that it seemed like INHS' findings regarding pesticide drift might be beyond the capacity of INPC. She said INPC sites that are under the Natural Areas Preservation Act can be monitored but there are other agencies. The EPA rejected the registration due to failure to incorporate risks to non-target species, human health, that kind of thing. She expressed that she feels uncomfortable about such a broad resolution for legal action without really understanding what we as an agency, as an organization can effectively do.

Commission Chair Derby Lewis repeated the motion for clarity:
Resolve that the Commission requests INPC staff work with other State agencies on potential next steps to pursue policy and/or legal action.

Commission Chair Derby Lewis explained despite unanswered questions, there's enough information to act now. We would like to begin the process of figuring out what those actions would be, either by policy or legal action. We know violations have occurred and it seems we need to discern next steps. This resolution asks INPC to figure out what those next steps are.

Commissioner DeMauro-Roth asked if we are providing the policy framework or are we asking staff to give us the policy framework based on their interactions with other State agencies?

Commission Chair Derby Lewis answered that we are asking staff to find those next steps in conjunction with other agencies.

Commissioner DeMauro-Roth stated she could support that.

It was moved by Commission Chair Derby Lewis, seconded by Commissioner Oplt, and carried to resolve that the Commission requests INPC staff work with other State agencies on potential next steps to pursue policy and/or legal action related to the trespass of chemicals onto INPC sites.

(Resolution 2631)

Item 5: Human Remains Protection Act

Brooke Morgan, Illinois State Museum, presented this item - see Attachment 2
Commission Chair Derby Lewis thanked Brooke.

Commissioner Clay asked if a private landowner has documented burial mounds and they were asked by a tribe to repatriate remains, could they work out a private deal to do that?

Brooke Morgan replied that the answer is yes, and this has already been done. In December of 2022, the Illinois State Museum facilitated with a tribe and a county historical society,

who was not subject to NAGPRA because they did not receive federal funds, the repatriation of remains on a local property. The potential is there, and those sites can be recorded as protected sites in the Illinois State Archeological files.

Commissioner Kessel referred to a point earlier in the presentation, where Brooke Morgan mentioned that other states in the Midwest have multiple state protected reburial sites. Is there a plan to add more regional state protected burial sites?

Brooke Morgan answered that she hopes the answer is yes. There has been discussion about having northern, southern, and central sites. Right now, we have only worked with one tribe who has indicated interest in using that general location again for repatriation. We assume a lot of these will be on a case-by-case basis.

Commissioner Parker asked about previous discussion at the 245th INPC meeting related to Tribal partners being required to ask permission for repatriation on current protected land. There were concerns about the process of asking permission and whether it was appropriate to do it in a public forum. How should we as a Commission be thinking about these broader questions?

Brooke Morgan thanked Commissioner Parker for her question. This brings up an important point she did not make in the presentation. She is giving this presentation in a public forum only because this burial site is marked and largely known to the public and part of the local community's awareness. Generally, archeological sites are protected, and those details cannot be shared with the public under State law. Some information is redacted for that reason. This was a good test case because there is a known public narrative. These conversations are usually done more privately. Secondly, regarding asking permission, if a written report to inform you beforehand is all that is needed and then a record can be made in accordance with INPC's bylaws, then that would be something tribes might be interested in.

Commission Chair Derby Lewis commented that these matters should be handled at a department level to allow for as few barriers and constraints as possible in regard to permission to repatriate. This could look like reserved rights on a site. In thinking about the ethical implications of asking to rebury your ancestors on land that was once yours, it is difficult. We are in a moment of reckoning with what happened in history regarding land and removal. She wondered if INPC staff can begin to explore scenarios and options to make it as easy as possible to repatriate on land with the highest protections. Many tribes prefer to repatriate on these protected sites with the reduced risk of having to move them to another site.

Todd Strole commented a resolution to that affect would be appropriate.

It was moved by Commission Chair Derby Lewis, seconded by Commissioner Clay, and carried to resolve we ask Illinois Nature Preserves Staff to work with the Illinois State Museum to begin discussion around removing barriers and constraints to repatriating ancestral remains and make recommendations to the Commission.

(Resolution 2632)

Consultant David Thomas asked how we balance this with the protection of threatened and endangered species. How do we know where remains are from when they are found on nature preserves?

Brooke Morgan responded the law allows for identification in the field by a certified skeletal analyst. There is a list of people qualified in the state. They use context, measurements, artifacts, and other tools to identify them. Once it's determined to be Native American, the tribe associated with that area is called. These remains are not scientifically linked to specific tribes, rather through context a tribe will take the lead to ensure that ancestor will receive proper care. Tribes usually want context from the skeletal analyst, if possible, about the time period, type of site and other information available.

Item 6: Smart Energy Design Assistance Center (SEDAC) - IDNR Climate Action Plan

Chris Young, IDNR, and Cassie Carroll, SEDAC, presented this item - see Attachment 3

Commission Chair Derby Lewis thanked the presenters and noted how deeply inspiring the presentation was.

Commissioner Szafoni asked how they are thinking about prescribed fire in the Climate Action Plan.

Chris Young asked for clarification on the question. Does it regard carbon emissions?

Commissioner Szafoni responded yes.

Chris Young continued to say that in the literature on prescribed fire this is such a small part of the landscape and on a rotational basis that the impact is not as consistent as driving your car to work every day. As a department, prescribed fire is one of the best ways to address large acreage sites to set back invasive species and promote growth. Of course, staff have many other considerations about those sites as well.

Consultant Bill McClain commented that he is intrigued by the statement to increase resilience of natural systems and species in natural areas. Are there examples?

Chris Young answered that when we talk about resilience, we are talking about health. A healthy body is better able to fend off disease and other stressors. They look at natural areas the same way. It's important to take good care of them to ensure they are more resistant to stressors thrown at them.

Consultant Bill McClain asked if a buffer around the natural area would be considered an example of increasing the resiliency?

Chris Young answered absolutely yes, and coming up in the next year there will be a meeting for the 30 by 30 initiative. As we all know, Illinois is a highly agricultural state, and we lack large swaths of public land. Right now, we are working on models on how to protect the lands we do have, which includes building buffers around natural areas. For example, we

had a pipeline company come in the other day to discuss turning their right of way spaces into pollinator habitat. So, there are ways to maximize these spaces and buffers through the 30 by 30 initiative, which is basically to do the absolute best with what we have.

Cassie Carroll added this won't be a static plan. It will continue to evolve and be augmented as we get new ideas. We expect a revision process in the next 3-5 years through feedback.

Public Comment Period:

This was not originally included in the meeting agenda, but an opportunity was provided for audience members to make public comment with a 3-minute time limit.

Consultant Kim Erndt-Pitcher commented, considering what we learned today from the Illinois Natural History Survey, she would encourage the Commission to approach the Illinois Interagency Committee on Pesticides with this information and see if action can be taken at a State level.

Brooke Morgan took a moment and responded to a question regarding burial law that was posed on the WebEx. The question was, "If a private individual suspects they have burial mounds on their property, how can they have it properly recorded?" If you suspect there is a burial site on your property, she recommends contacting the State Historic Preservation Office. Contact information can be found on the department website. Also, please do not dig.

Greg Richard, on WebEx, commented on the herbicide presentation. He has 15 years of experience as a botanist for the CTAP program with some of the data presented. He knows the sites and methods very well. There were a lot of questions regarding further study, and he appreciates the value of long-term studies, but he wanted to make a point. When you have 99% of sites with observable tree and vegetation damage, that is an actionable finding and likely an underestimation of how much damage is occurring.

Item 7: Adjourn

It was moved by Commission Chair Derby Lewis, seconded by Commissioner DeMauro-Roth, and carried that the meeting be adjourned.

The Special INPC Meeting was adjourned at 3:40pm.