



**Tribal Pesticide Program Council**

**Winter 2025/26**

## **From Native Pollinators to Native Foods and More**

Ed Spevak is the Curator of Invertebrates at the St. Louis Zoo and Director for the Center for Native Pollinator Conservation. For nearly 47 years, Ed has worked in zoos and aquariums, spanning 8 different institutions. He has extensive experience with animal groups, working as both a mammal curator and an invertebrate curator. Ed established the Native Foods, Native Peoples, Native Pollinators program which recently became a 501(c)(3) nonprofit organization. He also co-leads the Saving Animals from Extinction (SAFE) North American Bison program and advises on a variety of other programs.



### **Pollinator Conservation Work**

Ed's involvement in pollinator conservation began during his first year in graduate school when he started raising butterflies with a friend in entomology. He notes, "We started coming up with ideas for butterfly houses and education, and at that time, there was only one in the entire country." He started working at the Bronx Zoo and continued his work with butterflies. At the Bronx Zoo, they did not have an invertebrate department, and instead, they fell into the mammal department. Ed oversaw the invertebrates and started to incorporate butterflies into exhibits, such as the rainforest habitat. He states, "This led to a temporary exhibit called the Butterfly Zone at the Bronx Zoo, which has now become permanent." At the time, this temporary exhibit lasted seven years and Ed noted it received a "National Exhibit award through the Association of Zoos and Aquariums, focusing on particularly native butterflies."

As his career took him across different institutions, he eventually joined the St. Louis Zoo as Curator of Invertebrates, and has held this position for the last 17 years. His passion for conservation continued when he got to St. Louis and he switched his focus to native bees rather than solely butterflies. He noted that native bees are keystone species in maintaining habitats and said, "Even if you're looking at saving other species, having bees as a component really helps to further broaden the conservation aspect." Not only did focusing on bees broaden the conservation aspect, but it allowed Ed to get more people involved. As he

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## From Native Pollinators to Native Foods and More (continued)



started developing the program at St. Louis Zoo, the emphasis was to “focus on native bees and get people to understand the diversity, their importance,” says Ed. Working alongside the University of Illinois, they put together the first bumblebee guide for Illinois and Missouri. He also helped establish the Honey Bee Health Coalition—which he explained consists of many groups such as honey producers, beekeepers, academics, government officials, agricultural businesses, etc. He explained his role on the Honey Bee Health Coalition, stating, “I’m there to make sure that native bees actually have a voice, because honey bees, people think a lot about, but they’re not native and they’re not necessarily the best pollinator for a variety of things.”

In addition, he has helped establish Farmers for Monarchs, Missourians for Monarchs, and the IUCN SSC Bumblebee Specialist Group (now called the Wild Bee Specialist Group). In 2010, they held the first conservation workshop on North American bumblebees at the St. Louis Zoo. According to Ed, bumblebees have been a nice way to get people interested in conservation and show their importance for food security and food sovereignty.

### Native Foods, Native Peoples, Native Pollinators

In 2012, Ed took a trip to Glacier National Park in Montana, and this experience sparked his interest in learning about the Indigenous peoples in the area. He spent time reading and trying to understand and learn as much as he could. Then, in 2015, the White House came out with a pollinator health strategy called, National Strategy to Promote the Health of Honey Bees and Other Pollinators. Under this strategy, Ed noted that “every state and every Tribe was to develop a managed pollinator protection plan.” This led to the Honey Bee Health Coalition, along with USDA, hosting a meeting in DC focusing on managed pollinator protection plans. Ed gave a presentation on native bees and offered his services to many of the Tribes present at the meeting. The first tribal connection Ed made was with the Winnebago Tribe of Nebraska.

The Winnebago Tribe invited Ed to talk to their tribal council on ways he could potentially help and the services he could offer. This developed into a long-term relationship that is still ongoing today. He has worked with the Winnebago Tribe in several ways, stating, “We’ve put in pollinator habitat, we’ve supplied seeds, equipment, both wildflower seeds but then also various crops seeds, including white corn.” The Winnebago Tribe introduced Ed to Omaha Tribe of Nebraska and through word-of-mouth, relationships with other Tribes began to develop organically. Ed now works with numerous Tribes including Winnebago, Omaha Tribe of Nebraska, Confederated Salish & Kootenai Tribes, Meskwaki Nation, Wichita and Affiliated Tribes, Iowa Tribe of Kansas and Nebraska, and others.

The Native Foods, Native Peoples, and Native Pollinators program grew from these beginnings and formed in 2016. They work with various Indigenous Tribes across North America to support food sovereignty,

**The Initiative Native Foods, Native Peoples, Native Pollinators**

Native Pollinators focuses on issues of food security of Native Americans and First Nations people, the intersection of wild and cultivated foods, cultural traditions and food sovereignty, healthy lands and people, and nature (as represented by pollinators).

Above: Links affecting Indigenous peoples' food systems, health, culture and the environment.

**The Medicine Wheel and the Squash Bee**

The Medicine Wheel represents the natural cycles of life. It embodies the Four Directions and the Seasons of the Year, as well as Father Sky, Mother Earth and Spirit Three—all of which symbolize dimensions of health. The Medicine Wheel symbolizes harmony, connections and peaceful interaction among all living beings on Earth.

The squash bee (*Pepomachus pruinosus*) is a specialist pollinator of squashes. When wild squashes and melons were first domesticated, the squash bee found the domestic squashes as attractive as the wild varieties. As the cultivation of squashes spread throughout North America with Native American agriculture, being paired traditionally together with beans and corn ("The Three Sisters"), the squash bee followed. It is currently the only known pollinator to move with agriculture.

The Medicine Wheel and the Squash Bee represent that connection between Native Foods, Native Peoples, Native Pollinators.

Squash bee on a pumpkin blossom

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**Native Foods Native Peoples Native Pollinators**

"For the Future of All Our Relations"

The Saint Louis Zoo  
WildCare Institute  
Center for Native Pollinator Conservation

The new Native Foods, Native Peoples, Native Pollinators initiative focuses on the intersection of wild and cultivated foods, cultural traditions and food sovereignty, the health of environments and people, and nature.



## From Native Pollinators to Native Foods and More (*continued*)

pollinator conservation, and bison restoration efforts. The organization takes a flexible approach, offering different services based on each Tribe's specific needs. Ed states, "With my Native Foods program, we go in offering services. We do not tell people what they should do, or what they need to do. So, every Tribe is a little bit different as to what they require." For example, with the Wichita and Affiliated Tribes, he provided them with raised beds and seeds to supply their members as they began their food sovereignty program. Another example is with the Otoe–Missouria Tribe in Oklahoma, where he supplied them with a polyhouse and seeds so they could start growing some of their fruits and vegetables. With the Iowa Tribe of Kansas and Nebraska, Native Foods is offering services by helping them survey the biodiversity as they develop a new tribal national park. Ed explained, "We have been doing non-destructive surveys of invertebrates on various parcels of land that are connected to the tribal national park to get an idea of what's there, how it's going to change over time." The Native Foods program is also currently working on signage for the Bison Range, which will focus on bison as a keystone species, as well as trail signs on native bees that will highlight the various seasons and the traditional plants that they pollinate.



This year, the Native Foods program became a registered nonprofit. Ed explained, "The Native Foods, Native Peoples, Native Pollinators, has been part of my Center for Native Pollinator Conservation through the St. Louis Zoo. But as I look towards retirement over the next several years, I wanted that to have a life beyond my time at the zoo." He worked with the Rise Veterans Foundation, a Native American veteran organization, and they helped support him in this process, completing all the necessary paperwork to register this as a nonprofit in the state of Missouri and a federal 501(c)(3). The long-term goal, according to Ed, is that eventually the Native Foods program will be run by Indigenous people across Indian Country. He envisions expanding beyond the U.S. to work with First Nations in Canada and groups in Mexico, possibly having regional staff organized around specific food lifeways (buffalo, salmon, Great Lakes fisheries), and even connecting with Indigenous chefs to help communities utilize the foods they grow.

### **Bison Restoration and Pollinator Connection—SAFE North American Bison Program**

Ed co-leads the Association of Zoos & Aquariums' SAFE North American Bison Program, focusing on in-situ conservation. Bison are connected to pollinator conservation through seed dispersal, heterogeneous grazing patterns that increase wildflower diversity, and habitat features like wallows that serve as nesting sites for some native bees. Ed stated, "With the bison program, too, we specifically wanted it to focus on food security, food sovereignty, rematriation. We have a number of Indigenous partners, as well as members of our steering committee. We work with TANKA Fund, Intertribal Buffalo Council, Indigenous Led, which coordinates the International Buffalo Treaty." According to Ed, "The goal is to restore bison to their proper role in the environment and for culture." He describes bison as "nature's best



## From Native Pollinators to Native Foods and More (*continued*)

steward” for maintaining and restoring lands.

Bison conservation and pollinator conservation are interconnected ecological efforts. Ed views the bison program as a corollary or complement to the Native Foods program. Using bison to maintain and restore lands, he stresses the importance of taking a holistic approach to conservation, saying, “It makes much more sense to focus on a holistic approach to conservation that's not focused on individual species, but focused on the whole suite of species and those cultural connections, because that is all interconnected, too.”

### Conclusion

Ed's work reflects a holistic and community-centered approach to conservation that integrates ecological science, cultural respect, and long-term sustainability. With 47 years of experience in zoos and aquariums, Ed has played an influential role in shaping conservation efforts by acknowledging the deep connections between pollinators, bison, habitat restoration, and Indigenous communities.

### Links

- <https://stlzoo.org/conservation/in-action/saint-louis-wildcare-institute/center-for-native-pollinator-conservation>
- <https://www.aza.org/safe-species#northamericanbison>

## Request for Tribal Stories About PFAS

The Tribal PFAS Working Group, hosted by our sister tribal partnership group the National Tribal Water Council, is looking for stories from Tribes about the impact of PFAS on tribal lands and resources.

PFAS, or Per- and polyfluoroalkyl substances (commonly known as "forever chemicals"), are increasingly recognized as a widespread problem due to their impacts on human and animal health and their persistence in the environment.

If your Tribe has experienced impacts from PFAS contamination please consider sharing your story to help researchers and policymakers understand the scope of the problem.

See the flyer at right for details.



**Join the Conversation:**

**How has PFAS Affected Your Tribe?**

The Tribal PFAS Working Group holds monthly calls and would like to invite tribal representatives and researchers to hear testimonials and presentations on how PFAS and other emerging contaminants have impacted tribal lands and resources.

If you are interested in sharing your story at one of our monthly calls, we'd love to hear from you. Please reach out to Elaine Wilson, NTCW Project Manager, at [elaine.wilson@nau.edu](mailto:elaine.wilson@nau.edu) to join our call.

For more information:  
<https://itep.nau.edu/ntwc/pfas-working-group/>

## TPPC Executive Committee Election Results and Vacant Positions

The TPPC held elections for the Executive Committee (EC) positions for Fiscal Year 2026-27 in the last few months of 2025, and would like to announce the winners: Renee Keezer of White Earth Nation was elected Chair of the EC, and Nina Hapner of the Kashia Band of Pomo Indians was reelected to the Vice-Chair position. Regional representatives elected include Gerald Wagner of the Blackfeet Nation for Region 8, Tacy Jensen of the Gila River Indian Community for Region 9, and Cricket (Joe) Herrera of the Yakama Nation for Region 10. At-Large representatives elected include Africa Dorame-Avalos of the Inter Tribal Council of Arizona, Eric Gjevre of the Coeur d'Alene Tribe, Jefferson Biakeddy of the Navajo Nation, and Jessica Raspitha of the Saint Regis Mohawk Tribe. Congratulations to all the new and returning members of the TPPC Executive Committee!

In addition to announcing the winners of the recent EC election, the TPPC would like to inform readers of some vacant positions on the EC, and invite interested tribal employees to get involved with the organization and possibly fill some of those vacancies. The TPPC is currently seeking representatives for Regions 1, 2, 3, 4, 5, 6, 7, and Alaska. If you are interested in representing your region or have questions about participating in the Executive Committee, please contact TPPC Coordinator Mark Daniels at [mark.daniels@nau.edu](mailto:mark.daniels@nau.edu) or (928) 523-8897.

## Updates and Announcements

### Conferences and Meetings:

#### AAPCO Spring Meeting

The Association of American Pesticide Control Officials (AAPCO) will hold their Spring meeting **March 1-4** in Alexandria, VA. For more information click [here](#).

#### TPPC Spring Meeting

The Tribal Pesticide Program Council will be holding our Spring meeting **March 4-6** in Washington, DC, and online. For more information click [here](#).

### Trainings and Courses:

#### Worker Protection Standard PIRT

The National Association of State Departments of Agriculture (NASDA) will provide a training with a focus on worker protection standards on **March 17-20** in Phoenix, AZ. For more information click [here](#).

#### Endangered Species Act Compliance Workshop

NASDA will provide a workshop on ESA compliance in Washington, DC on **May 19-21**. For more information click [here](#).

#### Agricultural Use Concerns PIRT

NASDA will provide a training with a focus on agricultural use concerns in the Willamette Valley of Oregon on **July 14-17**. For more information click [here](#).

## TPPC Executive Committee Members

**Renee Keezer**

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(Vacant)  
Region 2 Representative

(Vacant)  
Region 3 Representative

(Vacant)  
Region 4 Representative

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Region 5 Representative

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Region 6 Representative

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The TPPC is a member-based organization with more than 106 members from 68 Tribes and tribal organizations as of January 2026, whose activities are funded by a cooperative agreement with the EPA. The Council serves as a tribal technical resource, and provides a forum for dialogue between Tribes and the EPA on program and policy development relating to pesticides issues and concerns. Assistance provided to Tribes includes support in building tribal pesticide programs and conducting pesticide education and training, and the preparation of resources for Tribes interested in specialized issues such as Integrated Pest Management and pollinators. Through its interaction with the EPA, the TPPC keeps Tribes informed of developments in the regulation of pesticides and pesticide use, and provides feedback to the EPA on such matters from a tribal perspective (though it is important to note that communication between the EPA and the TPPC does not substitute for direct government-to-government consultation).

**For information about how to join the TPPC, contact Mark Daniels at [mark.daniels@nau.edu](mailto:mark.daniels@nau.edu) or (928) 523-8897.**

