

# Broad Implementation of The Lost Ladybug Project : Integrating New Places and New Faces Into a National Lifelong Learning Opportunity

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The Lost Ladybug Project is a nationally recognized citizen science project with participants in every state, we are using this infrastructure to broaden participation, networking and outreach.

**GOALS** for broadening Lost Ladybug Project participation:

1. Multiple ages and families with increased focus on adults and seniors.
2. Spanish speakers and communities.
3. Tribal Nations and Native Americans in general.
4. Geographical areas with low participation.
5. Our newest focus is targeted social media and use of locally oriented ads to a.) increase participation and science education in specific geographic areas, b.) identify undocumented invasive species and native species in decline, and c.) expand national ladybug database and knowledge of ladybug species ranges.



Building long-term relationships with youth leaders and groups in Tribal Nations, rural, and migrant communities.



LLP helped "polish" the chain of friendship by supporting and participating in the inter-Tribal Two Row Wampum Renewal Campaign canoe down the Hudson River.

Making cultural connections to food, nature, and environment.

Lost Ladybug Project was approved by the Haudenosaunee Environmental Task Force. Tribal Nations involved in a variety of ways : east, Tuscarora Nation School, Akwesasne Mohawk Nation Freedom School, Onondaga Nation Afterschool, Cayuga Nation Share Farm, Oneida Nation, Shinnecock Nation; north, Lac Courte Orielles Ojibwe Nation School, midwest/west, Southern Ute Nation Montessori Program, Lakota Nation, Cheyenne River Youth Garden, and the Navaho Nation Chinle Elementary School.



## IMPACTS

- For children, adults, seniors, families and communities to feel more comfortable and familiar with doing science. By creating concrete connections between the cultural community and science, people will also realize they already do science.
- For people to directly experience authentic science, with opportunities for meaningful achievement and mastery, through active participation in a national survey of ladybugs.
- For people to increase their understanding of the importance of preservation through biodiversity and conservation through these activities.

Be a citizen scientist. Contribute to real ongoing scientific research. Learn more about ladybugs on our website where you can view, sort, map, and graph the 26,000+ ladybugs found so far; find instructions for homemade sweep nets, fun children's activities, games, and a 4H SET curriculum; download or print beautiful ladybug posters and bookmarks, coloring comic book, identification guides, and ladybug booklist; listen to our ladybug song!

**Formative evaluation recommendations:**

- \*Create a downloadable LLP Program Guidelines and Materials Kit.
- \*Create an educators web page with a "menu" of programming options.
- \*During Search Events, include more direct conversation/reflection about the process of science being used and why it is important.
- \*More regularly incorporate data submission into Search Event programming.
- \*Encourage and provide resources for table/cart activities to focus on priority content areas of the LLP project.
- \*Provide encouragement or ideas for helping sites seek a local scientist or naturalist to participate in their LLP events.
- \*Focus on encouraging and empowering attendees to become self-directed citizen scientists after the program.