



Expedition: The BOATanical Expeditions, 2020-2021

Field Study: Conservation

Summary: “The Seed Huntress” Sefra Alexandra leads The Ecotype Project for the Connecticut Northeast Organic Farming Association, an effort to fortify the living seed banks of local ecoregions to safeguard habitat for pollinators. The initiative partners with botanists who collect seeds in the wild, organic farmers who amplify those seeds in founder plots, and nurseries who make these “truly local” native plants available to homeowners, landscapers and municipalities. To call attention to the effort, Sefra and a team of citizen scientist explorers embarked on the first BOATanical Expedition, where 10 paddlers in five canoes steward 500 native plants to be installed in Ecotype pollinator gardens across three states along the Connecticut (Quinnehtukqt) River riparian corridor.

THE EXPEDITION

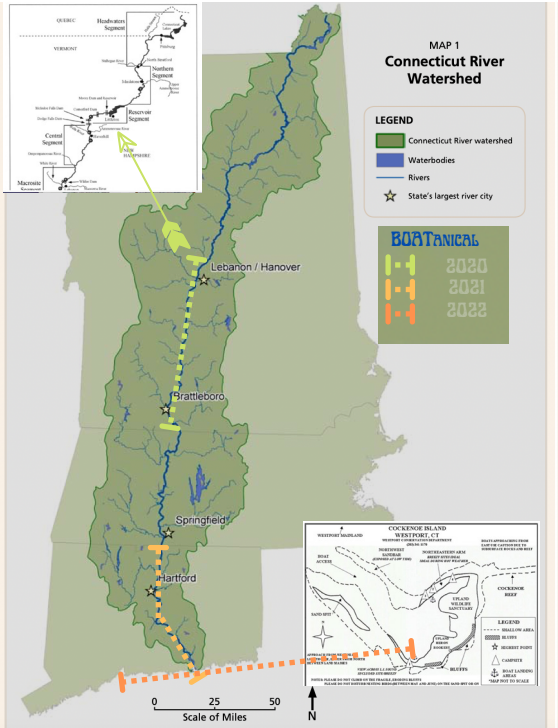
We are currently in the UN Decade of Ecosystem Restoration, with a global impetus to increase the amount of ecotypic {truly local wild-types} seed available to ecologically restore lands after man-made or natural disasters. The United States’s National Seed Strategy, encouraged ecologists around the country to address this vital issue. This call to action germinated The Ecotype Project of CT NOFA {Northeast Organic Farming Association}, which over the past five years has re-woven a native seed supply chain in ecoregion 59 of New England, USA, as a replicable model to rewild the Northeast’s fragmented landscape.

** The aim of the initiative is to teach seed literacy to organic farmers in the new specialty crop of growing native seed, to supply an ever-increasing demand.** To highlight this work and get more people involved as caretakers, The BOATanical Expedition was launched in 2020, where all ages were welcomed to paddle for the pollinators down the Quinnehtukqt* {Connecticut}

River- planting the right plants in the right place! When we put these truly local native plants back in the living seed bank {the soil}, nature’s myriad dispersal mechanisms help to proliferate these wild-type species along the river corridor, providing vital host plants for the pollinators + increasing ecosystem health. We do this by installing foundation plots of these seeds on organic farms along the



Sefra Alexandra with Flag #27, Connecticut River, 2021



Mara River Basin. BOATanical Expedition route 2020 and 2021

river to increase the amount of local native seed available in our region. These plants are imperative to stewarding our surrounding lands, providing food and habitat for the pollinators.

In 2020 we paddled 84 miles from New Hampshire to the Massachusetts border with 500 native plants. In 2021 we paddled 64 miles from the top of Connecticut to the Long Island Sound- spreading the seeds of ecological resilience in traditional Polynesian style outrigger canoes carrying 700 hundred native plants and thousands of ecotype seeds- dispersed by slingshot {ballochory}. On each expedition they rewilded meadows and planted “foundation plots” on riverside organic farms, welcoming beneficial insects back to the farms to increase crop production and reduce predation.

* The Algonquian term for the “long tidal river,” running from the source in Canada to the Long Island Sound- an ancestral trail of passage.

WHO

Sefra Alexandra, “The Seed Huntress”

WHAT

A paddle expedition to work with organic farmers and botanists to fortify living seed banks of local ecoregions.

WHEN

Part I: September 2020
Part II: September 2021

WHERE

Quinnehtukqut {Connecticut} River, from Hannover, New Hampshire, to the Long Island Sound.

WHY

To spread awareness with the help of her team of citizen scientists.



Sefra Alexandra, BOATanical Expedition, 2021

EXPEDITION GOALS

The BOATanical Expeditions “paddle for the pollinators,”**planting truly local native plants back in the “living seed banks,”**our soils.** The goal is to rewild our shared natural corridors giving the pollinators the food and habitat they need to support local food security on organic farms. We accomplish this by:

- Supporting local paddlers in planting local pollinator plants
- Promoting citizen science and backyard expeditions: we all have a role to play in caretaking and stewarding the lands where we live.
- Fortifying our “living seed banks”: planting ecotypic native plants in the riparian soils along an ecoregional framework- putting the right plants in the right place.
- Amplifying the amount of truly local native seed within a seedshed to support ecological restoration with appropriate plant genetic material dispersal.
- Creating a replicable model: educating the public about the seed supply chain necessary to weave botanists, farmers, seed collectors, nurserymen and end users to protect the pollinators and our global plant diversity.
- Educating farmers and residents about the myriad seed dispersal* mechanisms of nature and the exponential ROI {return on investment} of planting one seed {a sacred living embryo} that yields thousands the next season.

*anemochory: seed dispersal by wind; hydrochory: seed dispersal by water; myrmecochory: seed dispersal by ants; ornithology: seed dispersal by birds; ballochory: seed dispersal by ejection; anthropochory: seed dispersal by humans.



The BOATanical Expedition Team, Connecticut River, 2021

CHALLENGES FACED AND LESSONS LEARNED

Sourcing the proper plant material has been the main challenge of this work and impetus behind the Ecotype Project. The development of landscapes for human needs has drastically reduced the number of wild habitats in the Northeast, creating a fragmented landscape barren of the plants our pollinators need for food and habitat. Oftentimes when these areas are restored, they are replanted with species whose genetics are derived from a different area. Our work coordinates the efforts of botanists who collect seeds of wild-type native pollinator plants to give to organic farmers that grow these crops to increase the amount of truly local available seed. The Ecotype Project provides the nursery trade with these seeds so they can offer the right plants for the right place: when our pollinators have the resources they need, we can ensure we have the local food security we need.

Further challenges are continued monitoring of planted wilderness plots to determine success and ongoing farmer mentorship through stages of seed literacy, from implementation through collection and cleaning.



Sefra Alexandra with Flag #27, 2020

and removed pounds of invasive seeds. By replanting the living seed bank, millions of genetically appropriate seeds were reintroduced to the soil seed profile. These “host” plants rewild the riparian areas, growing habitat for local pollinators- providing nectar, food and shelter. By installing these foundational “seed increase” plots on farms, an abundance of beneficial insect diversity has been welcomed back to the landscape. This decreases predation, increases pollination and improves crop yields, promoting food security for we human stewards.

ABOUT THE FLAG CARRIER

The Seed Huntress is an ethno-BOATanist on perennial expedition to safeguard the arcs of

The greatest lesson learned is that our hunch was indeed correct, that when an expedition is presented in the local arena, citizen scientists of all backgrounds do indeed become inspired to participate in learning how to ecologically restore their own backyard. The feedback was consistently how encouraging it was to have a tangible effect on a small scale that can have an exponential impact on the massive challenges we face in terms of shifting climates and increasing natural and man-made disasters.

Our global challenge is to inspire as many seed stewards as possible to replicate this model in fortifying their own “seedsheds” by engaging everyone in the ancient art of seed saving. In this way we can ensure ecoregionally appropriate seed is available at scale to rewild our lands for all future generations.

EXPEDITION RESULTS

The BOATanical Expeditions germinated thousands of plants along the Quinnehtukqut (CT) River corridor



The BOATanical Expedition Team, Connecticut River, 2021



Sefra Alexandra with Flag #27, 2021

from Cornell University, is a Genebank Impacts Fellow, co-founder of Tactivate, and member of The Explorers Club.

botanical biodiversity around the seed banks to support local food security, seed sovereignty, and ecological restoration. Her BOATanical.org expeditions rewind riparian soils with truly local native seed from The Ecotype Project, Sefra's initiative to create the first ecoregional seed supply chain in the Northeastern USA. She holds her M.A.T in agroecological education

EXPEDITION TEAM

Principal Andrew Borden (Trote River Conservationist + Photographer), Matt Baatz (Trail Artist + Naturalist), Ben Billings (Navigator + Wilderness Guru), Joe McCarty (Ops + Expedition Cook), Nate The Great (River Legend), Dennis Smith (Quantum Philosopher), Andre Bravo (Videographer), Elliott Vigrass (Camp Lead), Emily Klar (Expedition Medic), Lauren Palsa (Herbalist + Floral Portraitist), Saralila Rose (Seed Saver + Minstrel), Juan Vasquez (Expedition Medic), Jesse Levin (Cultural Chameleon), Haisley Myrtle (Lead Scout), Lula Bean (Asst. Scout), Felix Kunze + Magnus Karlson (Photographers).

CONTACT INFORMATION

<https://www.seedhuntress.com>



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