Bionic Knotweed Control

The Mission

Sustainability

On the

Japanese

Knotweed

Problemacy
Japanese Knotweed; the most pernicious weed in the northern hemisphere has been rated as a biological catastrophe, for it`s monstrous tendency of overrunning the sensitive wetland areas of our nature reserves with monopolizing thickets due to which endangered native plant societies are often permanently displaced and their last occurrences extinguished.

So Japanese Knotweed is the most invasive plant on the northern globe and often treated with massive amounts of highly toxic herbicides. My goal is to teach folks how to take a bite out of their knotweed invasion, because the costs for other means of controlling polygonum cuspidatum and the damage done to construction sites and real estate are horrendous, while this project would not only save taxpayers their due, but yield a fantastic new foodsource, supply employment to any willing sponsor and protect our native environment; by turning this botanic pest into an economical blessing.

Not until 2002 did I realize that Japanese Knotweed was not just another edible wildplant, that I introduced to the attendance of my herbwalks. I would bring a jar of Knotweed jam and buttered breadslices along any excursion and whenever we passed a knotweed stand I would pass forward my knowledge of it`s fascinating culinary attributes as I was taught by Monsieur Dumaine and Euell Gibbons.

In order to expand my monologue I started surfing the internet and learned that Fallopia japonica found mention mostly on gardening websites where it`s victims exchanged their experiences about the plants eradication or vice versa their failure to control it`s growth.

Knotweed populations everywhere. A futuristic prediction would be that this plant may change the face of our landscape. Why let this precious regional produce go to waste ? While counting hundreds of populations in the Wiesbaden Area I learned that several nearby wetlands were infested even worse and what damage common ignorance causes. Every m² of Knotweed growth produces an average 12-15 Kg of biomass.

Up to a hundred dry hollow stalks persist the elements for years to come, withdraw and conserve the soils nutriments.

While I found numerous larger monopolizing patches where the native habitat has been completely displaced,
I discovered several invasive species websites dedicated to Knotweed management all collectively ignorant to the fact that Knotweed is first and foremost a fantastic foodsource; which`s became an invasive weed due to a lack of natural enemies.

Although it`s been predicted that knotweed`s in the process of a culinary boom as Wild Garlic has been going through in the last fifteen years and proven by the fact that ever more often the plant finds mention in cookbooks, the idea to connect it`s edibility against it`s invasive attributes, has not been really recognized yet. Mainly because specialists und consumers generally harvest the sprouts only over a span of ten days before it get`s to fibrous. Here, my semi-cultivation makes all the difference.

In 2003 I had my booklet My Appetite; Your Herbicide completed, eager to offer advice and avoid further damage of our ecosystem by unnecessary, losses to native plant societies and waste of potential capital.

But to volunteer with local control programs turned out to be the hardest part; of establishing my Bionic Knotweed Control. Specialists all over the world agree that a manual control is virtually impossible and that successful management usually requires herbicides.

Due to it`s vigorous growth of, especially in watersheds, up to 30 cm a day, harvest by wildfoodists has traditionally been limited to a span of probably 10 days; before the stalks become to fibrous. That`s why knotweed has never become a popular produce item of any culinary or agricultural importance. Here`s the significant difference between plain destructive mowing and disposal of the biomass, compared to semi-cultivating designated populations to reap an agricultural value and renature it`s native inhabitants.

While the manual control is hard labour, the bionic treatment has an instant symptomatic impact on the plants aggressive tendency because once your action is a harvest and your supplied with it`s beneficial profit; the entire measure gains a constructive and very motivation aspect which no other mean of control can match. In order to handle the advance of the knotweed invasion the most sustainable way, I suggest to semi-cultivate any population that suitable for human consumption in terms of the "Bio" standard. That way a good percentage of general knotweed control may be financially covered and communities would be able to save a lot of tax money presently squandered by temporary means.
Each designated population is thoroughly cleaned, all stalks removed, burned and the ashes, after Phase 1, returned to the soil before the process of renaturing begins.

To attempt the control of a full grown population is useless because the organism has already begun its secondary metabolism and all sprouts are too fibrous for Knotty Foods.

The tolerable leaf development during harvest (Phase 2). This can only be accomplished by daily operation throughout the entire 10 weeks of the plants primary growth period.

The sprouts reach a length of 30-40 cm a day and the average yield is 70 g per day and m².

After the harvest, the populations have to be weeded from all the tiny sprout bushels representing a secondary sort of growth that develop their leaves immediately upon surfacing. These sprouts are collected for the isolation of resveratrol and cosmetic application.
Eleven populations of Japanese Knotweed along the Nerotal Schwarzbach Stream.

Pop. # 11 = ca. 350 m²; The colonies spread out over 100 meters along the stream.

Pop. # 10 = 6 m²
Pop. # 9 = 40 m²
Pop. # 8 = 150 m²
Pop. # 7 = ca. 2 m²
Pop. # 6 = ca. 70 m²
Pop. # 4 = ca. 200 m²
Pop. # 3 = ca. 15 m²
Pop. # 2 = ca. 80 m²
Pop. # 1 = ca. 100 m²

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Along the entire Schwarzbach stream single knotweed populations are expanding their growth toward Wiesbaden`s most precious nature reserve “Rabengrund” which inhabits a total of 350 native species. It`s protection was the trigger to initiate this entire project in 2004.

To reinstate the native vegetation (Phase 3) has been the reward for all the backaches of fighting reynoutria`s incredible vitality. All through the season; from the earliest buttercups to the last teasels. The seeds of more than 70 species have been gathering, dried and stored. And once the grounds had been laid free from a thick layer of crushed knotweed stems, which generally hinders the germination of native plants, all collected seeds were sowed to reinstate the entire plant society.

Above; some of the grass plants I fetched along my daily routine of weeding the populations of the project. Because my identification skills were mostly specialist to edible wildplants I have been teaming up with specialists of botany, nature reserve, culinaric and landscaping to constitute an educational textbook of the basic principles of the Bionic Knotweed Control. Through a three month training adjusted to further the educational fundament of either cooks or gardeners an entire new profession is being developed to solute the problemacy of invasive weeds by their edibility. So are specific plans in progress to include jewelweed, topinambour, giant hogweed, yellow nutsedge, mahony, garlic mustard and others to organize the same sort of event that Mr. Peter Gail has established with his Dandelion Festival. The primer has been my Annual Knotweed Seminar which will take place the third time this year.

In a restaurant located anywhere near larger patches of knotweed, I combine an excursion along with a cooking presentation, to 1. Show the problem, when fullgrown populations in the neighbourhood can be closely examined and then 2. Offer the most sustainable solution. Especially to private landowners that presently seek advice at gardener`s websites; resulting in chemical appliances.

Want to poison thy own land ? If not, the seminar “My Appetite...Your Herbicide” provides the total package. Plant identification, biological principles behind the semi-cultivation, preparation; the nutritional benefits and it`s medical potential to prophylax all sort of disease.

And of course; especially gardeners still need to understand the urgent advice that plant parts shall not be replanted anywhere else for ornamental purposes, in any other way than shown here !
In 2006 the Wiesbaden Environmental Office agreed to declare The Bionic Knotweed Control to a three year pilot project and gave forward recommendations to the Hessian State Authorities to support it’s further establishment. Any community that is presently involved in chemical treatment spends an average 20 € for every m² each year, wreaking havoc to both their ecology & economy, all the while; 140 € per m² are the reward for lifting this issue, into the hinges of reason.

Thou shall not waste! Up to this very moment have people been starving to death all day due to a lack of food, every 5 count a wasted life! And in 2007 again will hundred thousand tons of Knotweed biomass either grow fibrous and useless to it`ς ecosystems food chain or be eradicated by chemical warfare; an equally drastic loss. But the decision; wether or not this weed is eradicated with herbicides or rightfully incorporated to our foodchain..................depends solely on your consuming choice!

Wether or not Knotty Foods will find acceptance and adaption to overall diet plans. a gigantic mass of potential food will be conquered by the most adaptable creature in it`ς environment. Why refuse a highly nutritious gift or feed it to beetles?

Any population designated for the project is marked with the knotweed sign as shown on the tree. This symbol has been adapted from several british knotweed control initiatives in order to expand the recognition and collaborate all actions towards the final goal of controlling the knotweed invasion. Any community that adapts the Bionic Control will make profits on certain patches by producing Knotty Foods and thereby gain far beyond merely reducing costs or the weed.
In 2004 four populations were threatening to form a huge thicket to monopolize the meadow and displace the entire fauna and flora.

In 2005 the Bionic Control began and throughout the season all leaf development was inhibited to weaken the plant, while 7 kg of knotweed-sprouts per m² were the average harvest.

In 2006 the combined effect of semi-cultivation and renaturing of the native plant-society has proven that this sustainable method is faster than all other current management approaches and yields a profit of 140 € per m².
This most delicate Relish of Japanese Knotweed is a hot, sweet & sour preparation to be served along with grilled meats, chicken nuggets, sausages or to spice stirfried vegetables or as shown below; the perfect complimentation to the authentic Japanese Cuisine at your favourite sushi restaurant.

Besides the Relish I also offer a Knotweed Jam. This sweet breadspread is the pure flavour without any artificial additives and may not seem as appetizing as your regular choice of strawberry marmalade; but your green choice is the smartest health solution. The addition of a new fooditem against general malnutrition and a counteract to the chemical eradication of Knotweed. So reserving nature may already begin at your breakfast table!

The products are manufactured in the NewTritionInk Kitchen. Every days harvest labeled it`s own daily charge. Knotty Foods are sold through Ebay, at the Wiesbadener Wochenmarkt, and in several health food stores and restaurants in the Rhein Main area. and in 2007 the goal is; to set up the business with any country that`s presently wasting all of it`s knotweed.
Further Infos about Wildfoods?


Sunny Johnson helps us untame our lives by incorporating wild foods into our modern-day diets. She holds an MS in Nutrition Education and has traveled to over 30 countries on 6 continents. Her vision is that this website will become a clearinghouse of information and resources for wild food plants worldwide.

Sunny`s Interview with wildfoodist Peter Becker from Wiesbaden Germany

Who got you interested in wild foods?

I`ve always been fascinated by plants and have been plugging off leaves, even from all sort of ornamental plants to see what they taste like and what they have to tell my blood. To furnish my chemical evolution. If we are what we eat; why not become what we could be; by the best possible food choice. In the late eighties when I grew up and got my own apartment, nutrition became really important to me. But the confusing mass of contradicting advices, diet instructions and foodscandals had gotten me really suspicious and I decided that nature should be my only guide. I asked myself the question: What would your dietplan consist, if instincts were still bundeling your foodpackages ? The Answer, is written throughout all NewTritionInk Seminars and projects.

Expand your foodchoice to it`s natural variety ! I began foraging when I used to work as a cook in Atlanta, New Orleans and Miami in the early nineties, because I was really fascinated by soulfood and where to find those collard greens and after Hurricane Andrew I strolled along Oceandrive and tried the palmhearts of all the species that Andrew had chopped down.

And especially the fact that any lawn is mowed and all it`s potential food goes to waste has been making me virtually sick. So I`ve been trying to convince folks of the Bionic Foodchoice; that develops with my projects.

What is your vision for the future of wild food?

The first and foremost measure to counteract General Malnutrition, which manifests itself in the fact that every second child is overweight; is that bodily restoration has to be taught in elementary school already ( as any comparable lifeform learns it`s foodpattern in early childhood), especially the biochemical span of possible nutrients a natural foodchoice offers.

Think of how many overweight people really believe they lack the willpower to withstand their munchies, their gravings ? Yet those gravings are physical messengers of a specific bodily need for a nutrient which general nutrition doesn`t supply.

Once wild foods become a regular part of the common mans diet, these gravings vanish. Any community needs a wildfood guide to gather the supply of it`s local, seasonal share of edible plants on the local farmers markets. Instead of a parsley garnish everyday; introduce a new plant. Any household in the western civilisation could save a dollar a week by using wildfoods and if those $ were invested in healthfood stores to support sustainable agriculture, rather than discount foods, this would make a huge impact.

What is the legacy you hope to leave for your children doing this work?

The example I set: Your work is not just making rent but your only lever to change the things you find wrong in the world.
Why does Japanese Knotweed speak to you so much? Any special experiences you want to share?

The global Knotweed problemacy shows what happens when the local foodchain of an environment is ignored. The Project is the experience I'm trying to share.

Where do you harvest the plant for your food products? Where do you produce them (home kitchen/certified kitchen/community kitchen)?

Last year I produced in community kitchens, for this years harvest I'm only just setting up a commercial manufacture for my Knotty Food production.

One more questions that comes up, is when you began your business?

What year and if anything prompted you to do so?

My business began in 2005 when I started selling Knotty Food products at local markets. Last year the first healthfood stores followed and this spring local restaurants will be added. I wanted to present my project at the Knotweed Conference in Falmouth, UK this month but I happen to be moving both private home and business so I simply can't make it timewise. But what I'm also trying is to get my products posted within the CMA Promotion for German foods, to promote this Control method especially in other countries where the plant is considered a noxious weed and eradicated with herbicides. So maybe I'll also be selling Knotty Foods in the U.S. soon. What prompted me...? Any community is weakening it's own economy by wasting local resources such as the huge mass of knotweed freely available. Also would a healthy new food item improve everyone wellbeing; especially when at the same time herbicide usage could be reduced, you know.

What kind of nutritional information could you provide for Japanese Knotweed?

The Polygonaceae Family is not generally part of the common diet. Because all of it's members are either seasonal like sorel, ethnically restricted to certain population groups like buckwheat or mostly disliked like rhubarb. Introducing Knotweed thereby bridges a nutritional gap and offers new chemical input of which Resveratrol is probably the most promising.

Resveratrol is an effective anti-bacterial, anti-viral, anti-fungal, anti-inflammatory, anti-cancer, anti-estrogen, anti-cholesterol, weight-controlling, blood pressure and blood sugar-normalizing agent, which is supposed to extend the lifespan of yeasts by 70% and equally benefits our health, so they say. Those who sell isolated resveratrol as a food suplement.

My message is that the highest natural concentration is found in Japanese Knotweed, especially when semi-cultivated like in the Bionic Control. By hindering leaf development the shoots can't properly absorb sunrays and in order to protect it's shoots the root sets free all of it's natural sun protective agent, which Resveratrol happens to function as.

From regular knotweed consumption my tan has darkened and my hands were stained and fascinating enough Canary breeders feed Knotweed to their birds which darkens the horn tissue of beak and claws of the canaries. So there may be the suntan lotion for oral appliance.

Do you want to see it eradicated?

Not at all. I love this plant, but Knotweed is considered a noxious weed in 20 some countries. To me the plant is one of my favorite foods and the entire issue of invasive weeds being eradicated is getting out of hand. Peter Gail has taught us long ago" if you can't be it, eat it !"

And this applies especially to so called noxious weeds, if their management is attempted with chemicals. Here a healthy food item is destroyed and we even pay for it twice.

In taxes to purchase the herbicides and again; healthwise, when their toxics backfire environmental hazard.

My project only hinders that knotweed populations invade nature reserves where rare native species would loose their last resort. But the example ought to teach all those countries how turning Knotty Food's into an object of mass consumption could finance Natur Reserve, everytime a consumer decides to eat his sausage with a serving of my relish rather than mustard or ketchup all the time.
I've never harvested Japanese Knotweed, but understand that it's a short harvesting period. When do you expect it in Germany?

Depends, in 2005 it began at the end of February, last year in May. Generally wildfoodists speak of a 10 day harvest before the shoots become to fibrous, my semi-cultivation allows a harvest of 10 weeks.

Do you enjoy foraging for other wild food plants?

Oh yes, in my neighbourhood there’re about 100 species I add to my diet on a regular base and I’m permanently searching for new plants; those which I know that are edible but haven’t been identified yet.

Please tell me more about how wild foods have been introduced into the local schools in Wiesbaden.

I’ve been selling my Knotty Foods at the local market last year and many school teachers aproached me as well as kindergardens, who were interested in wildfood guidance. All beginners seem to have the same problem with wild foods, the uncertainty and the fact that a book had been purchased that didn’t suit their educational backround or the vegetational situation of their foraging grounds.

So I’ve set up a path which inhabits 100 edible weeds and their location signed on a map as part of my "Primer to your possible foodvegetation": a wildfoodguide which gives beginners the security to improove their identification skills autobiographically and helps them find the right books, where to test them for free (libraries), where to find wildfoodseeds and how growing them on your balcony can ease the identification of difficult plantspecies and all the good advice any wildfoodist needs first. This booklet was mostly inspired by John Kallas, who so kindly allowed me to translate his Primer to Wild Food.

Anyway based on the path and my booklet I was invited to instruct a 10 th grader class and it was a very promising event, which shall become the most important NewTritionInk project once I’ve accomplished all goals of the knotweed project.

Frankly speaking is the Bionic Knotweed Control the best advertising for NewTritionInk because here I can demonstrate how profound the plants I introduce are researched, it shows how wonderful the benefit, of wildfoods added to our dietplan is and how wild foods anyone’s chance to the most frugal health prevention.

You mentioned that you hope this program will target those countries which use herbicides on the plant. Are you talking about in Europe, or around the world? If so, which countries?

Besides all three German speaking countries I would like to present my project and it’s results to specialist in the U.S., Canada, the U.K. Australia, New Zealand and any other country where knotweed is not used as a food item, but chemically eradicated. More than 25 countries in all where hundred thousands of tons Polygonum cuspidatum biomass are waiting for someone …….. ……..

…TO TAKE A BITE OUT OF THE KNOTWEED INVASION !!
That's why the pest has been turned into a blessing!

And any Community ought to join the team!

Because you've got the Choice:

Between a Tsunami of Weed

The Curse of Chemical Warfare

Or the most delicious form of Nature Reserve

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