# Ecoliteracy Program @ Droevendaal Food Forest

Pablo Van Neste On behalf of the Ecoliteracy Team















### Who are we?

- Msc Students and enthusiasts of agriculture, forestry and food systems
  - Wageningen University & Research
- Involved in Ecoliteracy Program at the University





#### Food forest critters





#### Wendy Jenkins Pablo Van Neste



Louise van der Stok



Jordy van Eijk



#### Kees van Veluw Arnold van der Leij

Bent Elvers





Katharina Grimm

# **Droevendaal Food Forest**

It is all about raising Ecoliteracy and using natural processes!!!

To A12 Utrecht /Arnhem

Farming Systems Ecology Unifarm / Proefbedrijf Droevendaal

WAGENINGEN

UNIVERSITY & RESEARCH

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A Multifunctional Community Supported Food Forest Chairgroup Farming Systems Ecology, WUR Ir. Kees van Veluw <u>Kees.vanveluw@wur.n;</u> 06-18193266 19 February 2019



GRFFI

CHOICE



Arborealis





To WUR Campus







~ drocoendal in leve! CCM Voorallen allen voor eCM







## **But what is Ecoliteracy?**

- The ability to understand the natural systems that make life on earth possible
- Understanding the **principles** of organization of ecological communities
- Using those principles for creating sustainable human communities.
- Students are encouraged to actively participate in the natural world
  - advocacy for natural systems.
- Deep understanding of the **soul**.





## **Food Forest as a learning environment**

- Effective space to conduct multidisciplinary experience and inquiry-based, relational, embodied learning
  - active engagement with nature, culture and food
  - bridge for education and learning sciences
- Complex, challenging observer to reflect
  - Head, hands, heart and spirit









## **The Program**

- Collaboration between children and students
- Year-round
- Closing knowledge gaps in research and education on Food Forests
- Research opportunities for students



# The aim

- Provide an outdoor educational experience
  - Based in permaculture & outdoor learning theory
- Methods used with the children are built upon experience and inquirybased learning
  - Broad range of topics
  - Renaissance scientists of the future
- Train outdoor educators







## Lessons learned

- Emphasis on animals, water, freedom & being together
  - Inform future design
- Co-creation of the program
  - we learn in tandem, reiterative
- Define clear goal for each class
  - balance between framework and deviation
- Process ≥ content/outcome
  - Models core values
- Shift from teach to facilitate



## Irons in the fire and next steps

- Connect to a network of education programs within agroforestry network
  - Gather curricula and tools for ecoliteracy education
- Utilize Children in Permaculture resources
  - Sowing, Growing, Harvesting
- Ongoing projects to span the season
- New options to develop program
  - Proposal writing
  - Expansion schools
  - Coordinator
- Engagement beyond Food Forest
  - Diaries
  - Weekly tasks



## To sum it all up....

- Droevendaal Food Forest is a natural place to explore
  - Complexity of ecological connections
  - Embeddedness within the local landscape & larger food system

#### Location provides promise

- Community building with respect for the local landscape & value for eco-education
- Institutions i.e. WUR eager to engage the public
- Participants of 2020 program are eager to continue
- Contributes to the socio-economic model of the Food Forest
  - Could contribute to farmers on a larger scale

### **Questions?**



Get in touch via <a href="mailto:ecoliteracy.dff@gmail.com">ecoliteracy.dff@gmail.com</a>





# Fritjof Capra

"In the coming decades, the survival of humanity will depend on our ecological literacy – our ability to understand the basic principles of ecology and to live accordingly. This means that ecoliteracy must become a critical skill for politicians, business leaders, and professionals in all spheres, and should be the most important part of education at all levels – from primary and secondary schools to colleges, universities, and the continuing education and training of professionals."



# Six Elements of Ecoliteracy (Wooltorton, 2006)

- 1. Ecological self—a sense of interconnectedness with the cycle of life on the basis of care and compassion, expansiveness of the soul and respect for others on the basis of respect for difference;
- 2. Sense of place and active citizenship—engagement in local culture, history, and organic community together with the ecosystem;
- 3. Systems thinking and relationship—a sense of relationality, connectedness, and context
- 4. The ecological paradigm—study of the whole, relationships, and networks, a focus on contextual knowledge, consideration of quality, attention to processes, study of patterns;
- 5. Pedagogy of education for sustainability—an experiential, participatory and multidisciplinary approach, focusing on the learning process;
- 6. Reading the world of nature and culture—engagement with nature as early in life as possible with ecoliteracy as first literacy.

### **The Lesson**

#### Lesson layout

Preparation general structure for season

- Planning (2hrs)
- Communication & briefing team
- Execution of the lesson (2hrs)
- Reflection moment (1 hr)

Lesson structure Observation 15min Theory 15 min Practical 45 min Reflection 15 min





#### Reflection

1. Content

Part 1 'Introduction' → communal Part 2 'Theory' → communal Part 3 'Activity' → in small groups Part 4 'Closing' → communal

#### Part 1 'Introduction'

- Orientation, reflection and observation

#### Part 2 'Theory'

- What is the topic of this week?
- What is the learning and social goal?
- The learning goal can be: learning new theory or discussing/being more conscious about the topic

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 What is it what we want the kids to remember after this lesson? What is the main point?

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#### Part 3 'Activity'

- What is the activity related to the topic?

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Dividing them in smaller groups where every group has a facilitator

#### Part 4 'Closing'

- Sharing experiences
- Recap
- Inner sustainability practice
- Optional: homework
- 2. Progress



It is important that the children and other participants see the food forest as a haven. A place where they can discover, learn, experience, enjoy and create. A place where they can be themselves, say whatever they want to say, feel free to express themselves, be honest, take care of each other and nature. We, together with the children learn the role we humans have being part of nature as well as having responsibilities towards nature. We learn the miracle of growing food from small seeds to fruit bearing plants or young chicks being born from an egg and laying eggs for themselves. We learn that farming - also in a food forest - needs labor and sometimes we face failure, unforeseen circumstances like extreme weather. We learn that nature can be vulnerable, but that we



Who are the team members of the Eco-literacy program?

The Eco-literacy team of the Food Forest Ring consists of a passionate core group of individuals who are mainly (ex-)students of the WUR, but anyone is welcome to join the group if the core team accepts. Outside of the core-team there are (student) volunteers, interns and thesis students who are contributing to the growth and development of the educational program. We encourage each other to read eco-literacy literature and try to find moments to discuss existing literature. We strive to strengthen the functioning of our core-team and our goal is to offer qualitative lessons to schools interested in developing the eco-literacy levels of their students.

We want to bring forth our interpretation of reading and understanding ecosystems and ecology by teaching children the lessons that came to us through our own experience. Many of these things can't be explained in books or words, but only through experience (i.e. slipping on mud in the pond, the smell of dried grass, falling asleep under the perfect tree to the sound of summer wind....). We want to integrate our scientific knowledge with experiential knowledge without it becoming an ecology course (so not only things that can be read in books). The children need to make up their own minds about how they feel towards the elements of the food forest. The teacher needs to understand that not everything the children experience now will be visible for an assessment within a short period of time. The members need to acknowledge that the team's input is dynamic, and that there cannot be a standard set of lessons learned. However, learning goals are set as a direction to aim for and the actual lesson activities can be repeated and improved. We as a team want to grow as a group of volunteers and full-time personnel to meet the demands of more classes like this from different schools, so communicating to find committed people is always a priority.

Where do the children fit into the Eco-literacy program?

## **Our Approach**

#### <u>Team</u>

4-6 volunteers

#### 100 hours

(old) WUR Students, and other

ecoliterates

#### <u>Kids</u>

Eureka Program for 'hoogbegaafden' or **highly gifted children** 

24 students ages 10-13, accompanied by their teacher

#### 2 Seasons

Late summer/Fall Early Spring/Summer

#### 20 lessons

10 each season 90 euros/lesson



