

Report Week 3: 04.11 - 10.11

Observation

- Observed ...
 - See: [Animal sighting](#)
 - Crab, mice, dogs (from the neighbours?), praying manthis
 - See: [Bird sighting](#)
 - An owl, probably hunting the mice, is not around when there is too much wind.
 - Black kite? Some big prey bird.
 - See: [Events list](#)
 - Very strong eastern wind -> potential for wind energy
 - Found some historical data, too
 - See: [Plant list](#)
 -
 - See: [Nursery - Ideas](#)
 - Pinus pinea (pine nut), Pinus Gerardiana...
 - See [Ideas for the field](#)
 - Pond, windbreaks, ...

Practice

- Maintained and improved the compost
- Cared for the basil ($\frac{2}{3}$ successful)
- Bought
 - Scissors (13JOD) ->
 - Pruning scissors (6 JOD)
- Started cleaning the lower part of the field

Education

- Watched Geoff Lawton's PDC 2.0 Course
 - Chapter 7 ("Water")
 - Chapter 8 ("Soil")
- Read about
 - [Syntropic agriculture](#)
- Learned
 - Web development (for the first version of the database)

Thoughts

- Why cut elements of the compost in small pieces? For a faster decomposition? Sure! But mostly: it's very difficult to mix/turn a compost with big pieces.
- I used my "on the way" technique to cut/uproot weeds; need to cut entire branches - easier to transport, then cut them further when putting them in the compost.
- Lawton and Götsch say actually the same thing: plants adapt to the state of the soil; their succession brings "soil health"; hence, Götsch suggests pruning to manage/accelerate the effect.
- Mind blown: Evapotranspiration actually "pulls" nutrients from the soil; it creates a pressure gradient from the roots to the leaves

Design ideas

- There is strong eastern wind this week. We need to
 - Shelter nature from it (it dries out the soil)
 - Use its energy to pump water back up, for instance
- Windbreak: as a first step, to shelter the growing trees, we could put together a "vertical compost" with 4 posts arranged in a rectangle, and palm leaves in it; they are partly permeable and there is plenty of them
- Lawton discourages the use of swales where there are steep slopes; the eastern wall should be terrassed, then. Along with legume trees and alfaroba/carub tree, Firas suggested lemon trees.
- For water, we have
 - 17 hours of water every 3 days
 - 24 hour every 3 days (unused)
- We could grow pinon pine seed, it's very expensive in Jordan
 - Anas mentioned getting saplings for free from the Ministry of Agriculture, for windshields
- It would be nice to have a 3D plan of the farm -> see [this link](#)
- Sewage to methane, or sewage to water / fertilizer will be a must!
- Fridge/refrigeration splits room temperature in cold (inside) and hot (outside). It would be nice to use the hot (e.g. for hatching the eggs, heating compost, greenhouse, ...)