

Permapeople Open Data Day 2021

March 6, 2021 - 8pm CET / 2pm EST / 11am PDT

#ODD 21

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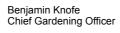
Agenda

Intro
The project
Open data @ Permapeople
Open discussion

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Permapeople Team





permapeople.org/ben twitter.com/bknofe



Simon Gooder Chief Gardening Officer

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Christina Sanko Chief Gardening Officer

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3

Beyond sustainability

"The greatest change we need to make is from consumption to **production**, even if on a small scale, in our own gardens. If only 10% of us do this, there is enough for everyone."

Bill Mollison

What is permaculture?

Permanent agriculture permanent culture

The ideas have been around forever. Since human civilization existed. Essentially it's a way of seeing the whole system -- and seeing yourself as a part of it.

Wikipedia describes it as...

Permaculture is an approach to land management and philosophy that adopts arrangements observed in flourishing natural ecosystems. It includes a set of design principles derived using whole systems thinking. It uses these principles in fields such as regenerative agriculture, rewilding, and community resilience.

If you're interested...

Now that we've got the official definitions out of the way - feel free to ask for further reading if you need!

Learn more...

- Joseph Russell Smith
- P. A. Yeomans
- Sepp Holzer
- Bill Mollison
- David Holmgren
- Masanobu Fukuoka
- Peter Bane
- Ruth Stout
- Dr. Elaine Ingham
- Toby HemenwayGeoff Lawton
- Ben Falk
- Ken MudgeStefan Sobkowiak of Miracle Farms
- Sean of Edible Acres
- JM Fortier of La Ferme des Quatre-Temps

Please look up these people if you want to learn more!

Mission

- Facilitate localized production through regenerative action

 Grow food
- Help others grow food
- Share surplus (data/ food/knowledge)





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[Image source: https://giphy.com/gifs/bobs-burgers-fox-bobs-burgers-tv-3o72F19RJozHwoU8Ra]

To use our experience, passion, and tech expertise to spark an ecological-regenerative-permaculture-inspired-gardening-and-small-scale-farming-and-localized-post-capitalist-goods-production-revolution

Solving the knowledge problem

- Anecdotal
- Scattered and disorganized
- Dominated by a monoculture



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8

Anecdotal

• Info on holistic/regenerative gardening is often anecdotal, as there isn't a whole lot of funding for research in these systems. Most of the funding comes through big-ag which has become increasingly reliant on heavy inputs. One of the main problems we see here is lack of support. We aim to provide and share/cite the research that does exist behind these methods.

Scattered and disorganized

• Info on holistic/regenerative practices is widely scattered and is rarely systematized. We've brought together a number of sources to make this project happen. From existing plant-databases and wikipedia, to cherry-picking sources from dozens of seed company websites.

Additionally, there are dozens of hard-to-find, or out-of-print books just full of brilliant information - soon to be lost to the digital age. We're even investigating availability of rights on some of these tomes of traditional knowledge.

Dominated by a monoculture

• It's no secret that most food production (and permaculture/regenerative ag) is dominated by anglophone, white, Western perspectives. Food is one of the most volatile systems in the world, and yet we leave it in the hands of a few money-hungry giants, bent on increasing inputs, while discouraging open pollination and ancient varieties of fruits and vegetables.

How can we address the food system without addressing the monoculture behind it? We're not sure how to get here yet, but maybe we should be elevating some of the less-represented voices in the regenerative ag movement.

Research, grow, harvest, trade surplus, share knowledge, repeat.

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sharing knowledge, direct distribution - trading products (marktplatz), garden planner, knowledge gathering

hard facts, scientifically grounded knowledge on planting, permaculture systematic and concentrated knowledge applicable knowledge on planting open access and empowerment of marginalized groups and their knowledge

- Companion planting
- Guild design
- ✔ planning and monitoring tools
- $\begin{tabular}{c} \end{tabular} \begin{tabular}{c} \end{tabula$
- ✓ circular economy!

Goals

- free information and tools
- regenerative action: grow more food!
- post-capitalism





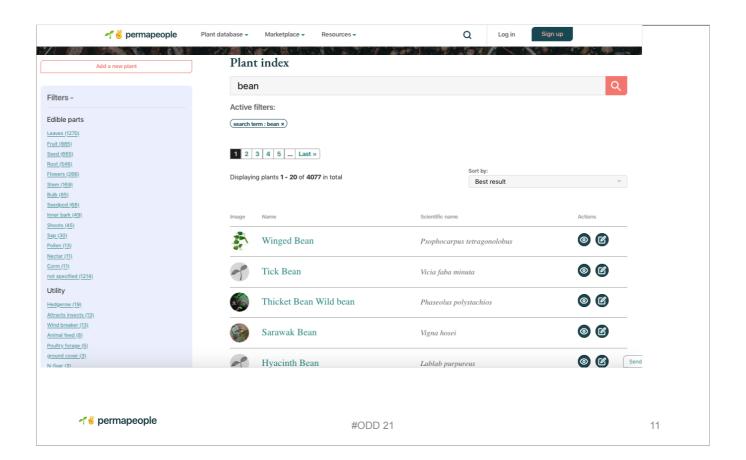
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10

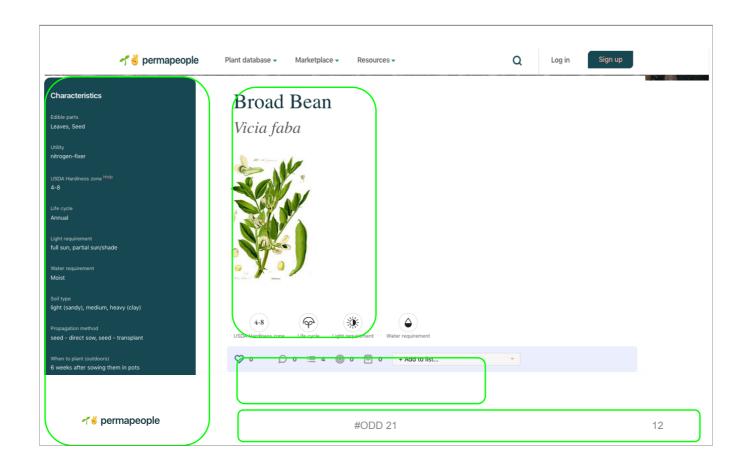
Open source infoThrough open-source information and tools, we can empower *anyone* who has the interest and means to grow something.

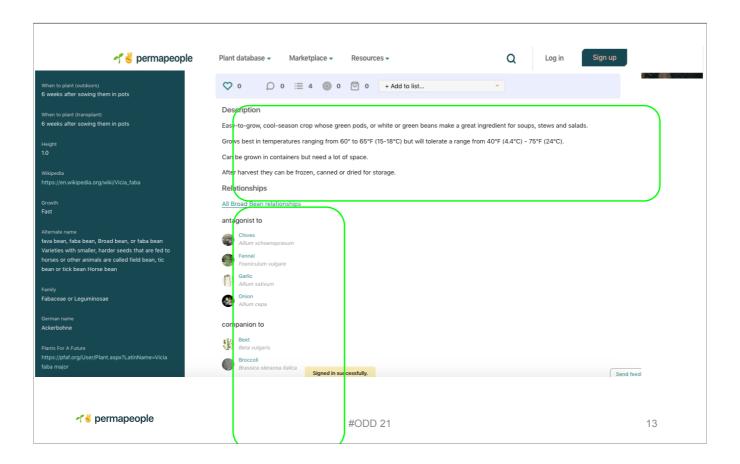
Regenerative action
what we mean by regenerative is the agenda to go beyond sustainability as sustaining only means to keep a broken system running. The regenerative movement takes an active stance, aiming at fixing our soils, food, nature and ultimately our communities and the planet as a whole.

Post capitalism
We're not here to argue the merits of a governing system. We believe that we can work within the system to regenerate wealth and power through hyper-localized natural goods production. Share and trade surplus with your neighbours, trade seeds, plant public food, reconnect and build a flourishing community.



basic functions: the core of the project is the plant database with currently more than 8,500 plant entries. On our landing page you can basically type in any plant term you are looking for, including latin, English or German names. Anyone can use the search functions of the plant database. You do not have to sign up or make an account for it. If you do not find the plant you are looking for you can also add your entry. If you want to contribute your knowledge to the database you will have to sign up to make changes or contributions.





plant profiles

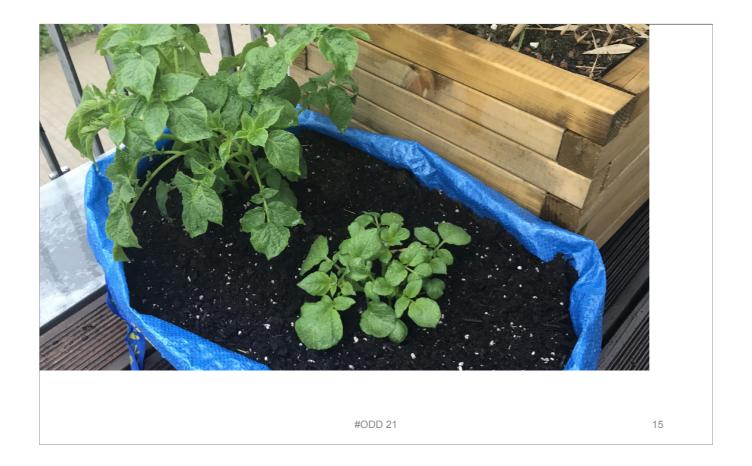
Open data @ Permapeople



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14

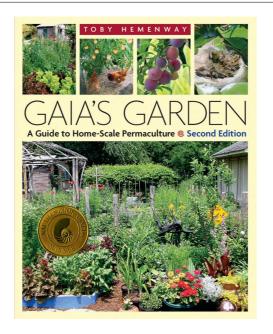
Talking about the challenges we faced so far and opportunities we see for the future



The story how I started

no idea from permaculture or any other ecological or regenerative methods

 $see\ here: \underline{https://permapeople.org/blog/2020/10/05/why-i-am-building-permapeople-org.html}$



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16

[Image source https://www.chelseagreen.com/product/gaias-garden/]

I started watching youtube videos on gardening and one youtuber recommended this book, so I bought it

obvious ideas like soil gets never tilled in nature

our garden has poor soil

scattered info - there are a lot of resources outside, hard to find, hard to search ermaculture information (guild, companion planting, layers, multi uses) you end up random googling

no tilling

It has a great list of plants at the end I couldn't find the table digitally, so I typed it all down into a spreadsheet and then I had the idea to turn this into a database for everyone

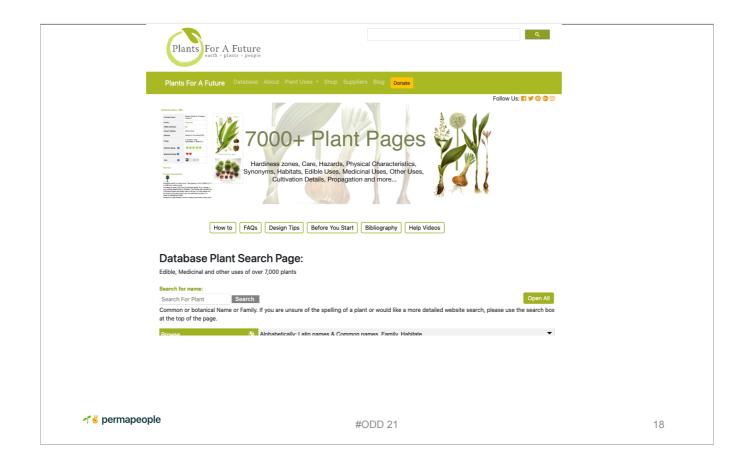
and why I thought having a open collaboration database is a good idea

| 111 | Poncirus Iritoliata | Bitter orange | [2] Irees | Preters tull sun | | [Ir] Iree [E] Evergre | een [Fr] Fruit | [Med] Medicinal | [нар] нарітат |
|-----|----------------------|---------------------|------------|--------------------|------|-----------------------|-----------------|-----------------------|--------------------|
| 112 | Potentilla fruticosa | Cinquefoil | [3] Shrubs | Prefers full sun T | Tole | [Sh] Shrub [D] Deci | iduous Tea [| Wbr] Wind breaker | [Hr] Hedgerow |
| 113 | Prunus armeniaca | Apricot | [2] Trees | Prefers full sun | | [Tr] Tree [D] Decidu | uous [Fr] Fruit | [Ins] Attracts insec | ts [Hab] Habit |
| 114 | Prunus avium | Mazzard cherry | [2] Trees | Prefers full sun | | [Tr] Tree [D] Decidu | uous [Fr] Fruit | [Ins] Attracts insec | ts [Hab] Habit |
| 115 | Prunus caroliniana | Laurel cherry | [2] Trees | Prefers full sun P | Pref | [Tr] Tree [E] Evergre | een [Fr] Fruit | [Ins] Attracts insect | (Hab] Habita |
| 116 | Prunus cerasifera | Cherry plum | [2] Trees | Prefers full sun | | [Tr] Tree [D] Decidu | uous [Fr] Fruit | [Ins] Attracts insec | ts [Hab] Habit |
| 117 | Prunus domestica | Plum | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Fr] Fruit | [Hab] Habitat [F | or] Animal feed |
| 118 | Prunus dulcis | Almond | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Sd] Seed | [Ins] Attracts inse | cts [For] Anim |
| 119 | Prunus incisa | Fuji cherry | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Fr] Fruit | [For] Animal feed | [Hab] Habitat |
| 120 | Prunus insititia | Damson | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Fr] Fruit | [Med] Medicinal | [For] Animal feed |
| 121 | Prunus laurocerasus | English laurel | [2] Trees | Prefers full sun P | Pret | [E] Evergreen [Tr] T | Tree [Fr] Fruit | [For] Animal feed | [Hab] Habitat |
| 122 | Prunus Iusitanica | Portugese laurel | [2] Trees | Prefers full sun P | Pref | [E] Evergreen [Tr] T | Tree [For] Anim | al feed [Hab] Habi | tat [Ins] Attract |
| 123 | Prunus persica | Peach / Nectarine | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Fr] Fruit | [For] Animal feed | [Hab] Habitat |
| 124 | Prunus spinosa | Sloe | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] | Tree [Fr] Fruit | [Med] Medicinal | [Hab] Habitat |
| 125 | Prunus tomentosa | Nanking cherry | [3] Shrubs | Prefers full sun | | [D] Deciduous [Sh] | Shrub [Fr] Fru | it [Hab] Habitat | [For] Animal feed |
| 126 | Pseudosasa japonica | Bamboo | [3] Shrubs | Prefers full sun T | Γole | [E] Evergreen [Sh] S | Shrub [Sht] she | oot [Med] Medicina | [For] Animal |
| 127 | Rhamnus californica | California coffeebe | [2] Trees | Prefers full sun T | Tole | [D] Deciduous [Tr] 1 | Tree [Fr] Fruit | [Med] Medicinal | [Hab] Habitat |
| 128 | Rhamnus caroliniana | Indian cherry | [2] Trees | Prefers full sun T | Γolε | [D] Deciduous [Tr] | Tree [Fr] Fruit | [Chk] Poultry forag | [For] Animal |
| 129 | Rhamnus purshiana | Cascara | [2] Trees | Prefers full sun | | [D] Deciduous [Tr] 1 | Tree [Med] Me | dicinal [Ins] Attrac | ts insects [Hab |
| 130 | Rhus integrifolia | Lemonade berry | [3] Shrubs | Prefers full sun T | Tole | [D] Deciduous [Sh] | Shrub [Fr] Fru | it [FI] Flower [In | s] Attracts insect |
| 131 | Rhus typhina | Staghorn sumac | [3] Shrubs | Prefers full sun | | [D] Deciduous [Sh] | Shrub [Fr] Fru | it [Hab] Habitat | [Hr] Hedgerow |

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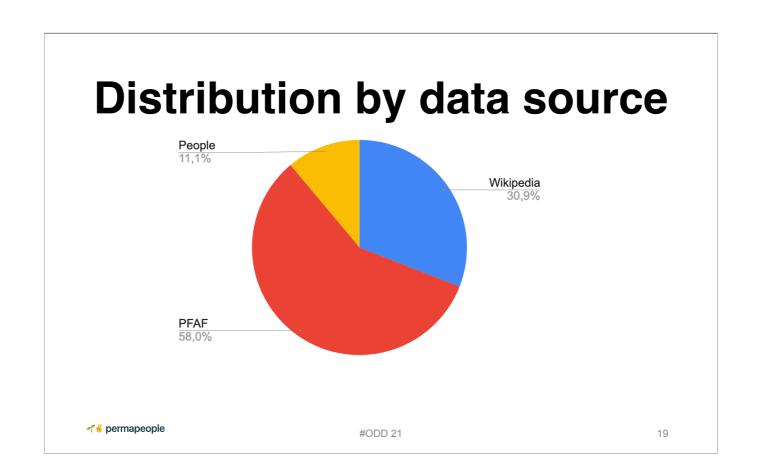
17

my first version as an airtable



[Image source: Own screenshot of https://pfaf.org/user/Default.aspx]

Plants for A Future as the best and closest plant database available with a free license.



Where the data actually is coming from we are using right now.

We want the 10% to grow more but we need contributors like you for that!

We want to give the current 10% back to all the other platforms!

Our database in numbers (March 2021)

21 contributors

8513 plants

4722 images

31714 edits (including automated edits)



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21

Challenges we discovered and how we think about it.

Disclaimer: Most of the things are also work-in-progress for us.

License? What license?



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22

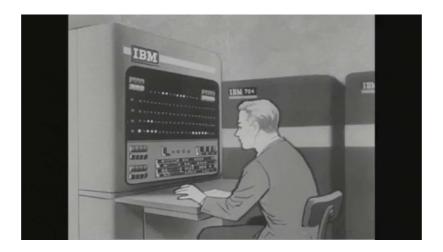
[Image source: https://giphy.com/gifs/quentin-tarantino-pulp-fiction-vincent-vega-3o7aTskHEUdgCQAXde]

- not even in a commercial setting
- not even after you bought access

Solution: we save all sources of edits. Later we want to make it visible which data piece is licensed in what way because plant profiles can consist of many different sources.

Also: Educating our users and make them aware of licensing etc.

Programmer needed





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23

 $[Image\ source:\ https://giphy.com/gifs/usnationalarchives-vintage-computer-3ov9jNziFTMfzSumAw]$

Use APIs

while many pages have a license, they do not offer any way to use that data fallback to scraping is the worst possible way (but still better than no license!)

solutions:

provide export formats for the whole data set and individual entries.

What license for data?

Creative Commons



Open **Database** License

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24

[Image source: https://devopsreactions.tumblr.com/post/36945505231/the-moment-you-have-to-pick-between-puppet-and]

- not clear when use is commercial
- CC for hard facts is problematic (example OSM moved to ODBL) licenses are not compatible

Creative Commons bases its licences on copyright. But facts like plant names or similar cannot be copyrighted. It gets legal talk pretty quickly but "minimal degree of creativity" and other things are important.

Opportunities



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ImitationCopying is the sincerest form of flattery.

- me

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- the same as we copied the data from PFAF/wiki, we want to give back what we created
 true sense of sharing!
- even better: data mashups: Like we combined different data sources for our needs, we hope that others use our dataset to create solutions on their own.

User Generated Data



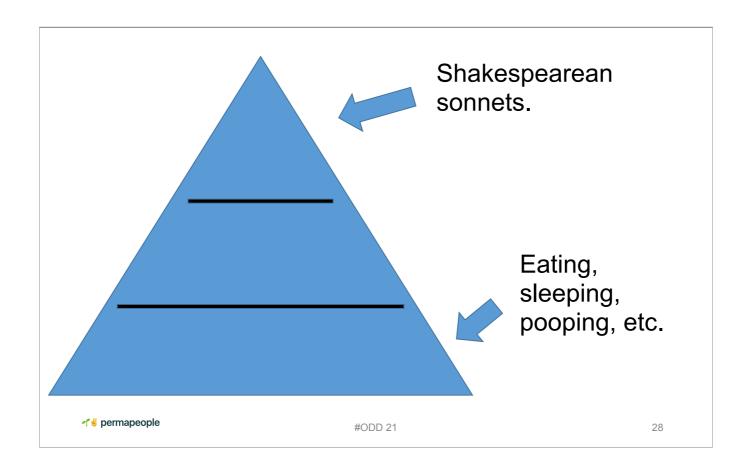
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27

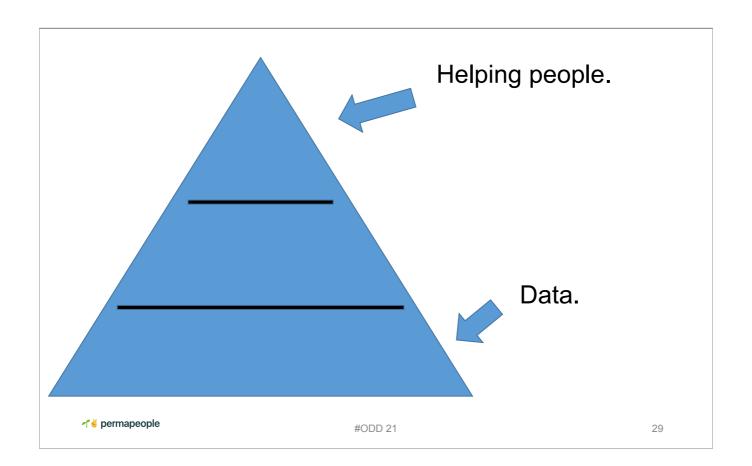
[Image source: https://giphy.com/gifs/CzbiCJTYOzHTW]

- garden log as an example people use our tool and generate data with it, which we can use to synthesize data back to the database example: if everyone logs the time of seed and harvest, we can "extract" that data into the database as "days to harvest" important: we need people's consent!



[Idea stolen from http://boringtechnology.club/#13]

Maslow's hierarchy, briefly, is the idea that you have to satisfy your more basic needs before higher levels of intellectual fulfillment are possible. You can't do poetry if you're worried about what you're going to eat today.



If we look at data and how we use it, we can look at it like this.

While you need data, a lot of it and in the best case open licensed, it is actually not whats helping.

Using that data to help people solve their problems, is what you looking for.

This means making it possible to put that data to work, by making it accessible for people to work with that data to solve their problems or whatever it is they are looking for. This means building solutions on top of that data.

For us we figured out pretty early on that providing the data is only the start. We spend a lot of time on other features like the search, lists, how to input and organize the data.



[Image source: https://en.meming.world/wiki/Drakeposting]

What I am trying to say: This is more like a general critique. Data is not the important part, it's the things you want to do with it.

Gardening is fun but data gardening is boring as hell.

Not everyone needs to research everything again and again and instead focus on the problems we want to solve
Instead of random googling over and over again, just use one source. Imagine a world without wikipedia!
We want to do gardening and growing food and I am sure you want to solve other problems with data

What's next for open data

- Public API
- Database export
- Fine grained licensing info
- make it easy to link and cite





#ODD 21

31

[Image source: https://gifer.com/en/DU2L]

- in different formats (HTML, XML, JSON, CSV, ???)
- export your lists and searches too
 Licenses are shown for every source and edit and how a plant profile is assembled from all these sources

THANK YOU!

How you can help: Plant something, Start composting, Share your surplus with neighbours, foster your community, plant things for wildlife, diversify your surroundings, share Permapeople with one person, contribute to Permapeople

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32

Discussion time!

- Any ideas on how we can all work together to facilitate an ecological-regenerative-permanent-culture-inspiredgardening-and-small-scale-farming-and-localized-postcapitalist-goods-production-revolution
- How can we get more people growing food?
- How can we get more people growing utilitarian things?
- · How can we build community?
- How can we empower each other?
- How can we empower unheard voices?

Let's plant the future

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34