27/08/2013: intelligent beehives - IBee
intelligent beehives is a long term research project on organic cradle to cradle beehives.
the goal is to develop a guerilla beehive that is small and sustainable, not destined to honey production but designed for monitoring the bee colonies and their foraging environment from a distance in a non-intrusive way, and to analyze the findings scientifically.

the project partners are:
- okno Brussels
- fab lab BCN
- sony CSL Paris
- University Barcelona
- Robot Lab Bristol

the research sections of the project are:
- organic beehive R&D
- development of integrated biodegradable sensors
- powering of the sensors with organic matter providing from the beehive itself
- analyses of the collected data
- fieldstudies & testing

on its development timeline, the project will go through different phases.
during these phases there will arise new collaboration constellations with specialised (associated) partners.
all these collaborations are part of the bigger IBee project, but do not represent the project as such.
they will go public under an appropriate name (the specific phase of the project they refer to) and can mention the IBee project, but they cannot claim the name IBee (Intelligent Beehives) for a subproject.

all subprojects referring to the IBee project should be made public under a cc license
attribution / non commercial / share alike

a project website will be set up under following domains :
http://intelligentbeehives.net and http://intelligentbeehives.org
this website will function as a portal, with a short project description an the mentioning of the partners and research sections, and from there all partners can refer towards their own websites.

example:
Fab Lab BCN is working with okno on the R&D phase of the organic beehive. In this development, the Open Source Warré hive is a first step in the research towards the organic hive. Different models, methods and electronics are tested. Fieldstudies are going on with Warre beehives (Valldaura) and with custommade electronics based upon arduino and raspberry pi (Brussels made by CSL). The collected data are open for study and research on opensensordata.net (at Sony CSL). These studies are very long term, the duration of a bee-season.

Fab Lab wants to continue the hardware development in collaboration with OTF and go public and OpenSource commercialise the hives under the name Intelligent Beehives. this should be done under a different name.

OTF and the Fab Lab can publicize the developed models as OS Beehives, for example. They can refer to the IBee project from the moment that the initial spirit of the project is respected (see intro above).
If Fab Lab BCN wants to bring in OTF as an associate project partner, the initial consortium would appreciate to be able to consult all subcontracts that are made between partners.

wat vooraf ging:
mails en skypes met Jonathan Minchin en OTF

So this leaves us near to a collaboration agreement. Points so far:

- OKNO and Annamie give specifications for sustainable healthy hives + requisites for data monitoring.

- "Intelligent Beehives" can remain the general name of the collaboration.

- OTF and Fab Lab BCN will collaborate to work on open source hardware designs.

- Sony CSL can work in support, especially for the electronics

- Smart Citizen should be used as a basis for the sensors.

- OTF, Fab Lab BCN work together to make a bee shield for the Smart Citizen Kit.

- The data produced can run through the Smart Citizen Platform (Adaptions needed)

- FabLab BCN and OTF can launch a Kickstarter campaign to fund the design and creation of 3 hives.

1. Warre Hive 2.0
2. African Top Bar Hive
3. Intelligent "gorilla" Hive

- All partners are presented at respective makerfaires as one theme. "intelligent Beehives" (Simultaneous events in October)

Hi Jon,

Intelligent Beehives
Bee colonies are now threatened in all industrialized nations. Given that the survival of bees is crucial for human sustainability, there is a great urgency to improve by all means the ways in which colonies could thrive. This project proposes to do that by building Intelligent Beehives. These are hives that have been enhanced with sensors, processing power and telecommunication facilities in order to monitor the health of the colony without interference and thus allow better care. Because bees are recognized as important biomarkers, the Intelligent Beehive project uses sensors and sensory processing algorithms to analyze the state of the hive, the quality of pollen and propolis as well as the behavior of the bees in order to monitor the state of the ecology in the surrounding area. At the initial stage the project aims to create a number of open source prototypes that makes use of an open source sensory kit, together with an open data platform called Smart Citizen. The designs of the hives are open and freely available online, the data is published together with geolocations and the ecological conditions of the area in which they are situated.

www.intelligentbeehives.net

#intelligentbeehives

Please change the name Intelligent Beehives for the Maker Faires into Open Source Beehives.

Also, I think you should reduce the abstract for the Maker Faire to what is really there : the open source harware model (OS Warre) and the smart citizen sensor kit.
The rest should not yet be disclosed because it has not been done yet and disonvolves the other partners.

Let us not create misunderstandings about this and damage relationships to the other partners.

xx, annemie

Hi Annemie

A good decision to separate the names considering the other partners involved.
We can continue to work on the Open Source Hives together and with your guidance to achieve what we need in the long run.

I had already changed the name to #Opensourcebeehives on the previous Maker Fair application.

Considering the Maker Faire application: Can we can still mention OKNO in the text?
It seems right that we should:

The text is below if you couldn't access it on google docs:
I will upload it tomorrow.

Cheers

Jonathan

Open Source Bee Hives:

The Open Source Beehives project is a collaborative response to the threat faced by bee populations in industrialised nations around the world. The project proposes to design hives that

can support bee colonies in a sustainable way and to monitor and track the health and behaviour of a colony as it develops. Each hive contains an open source sensory kit, The Smart Citizen Kit (SCK), which can transmit to an open data platform: (Smartcitizen.me) These sensor enhanced hive designs are open and freely available online, the data collected from each hive is published together with geolocations allowing for a further comparison and analysis of the hives.

In response to "Colony Collapse Disorder" (CCD) and other pressuring effects on bees; 'Open Tech Forever' and 'Fab Lab Barcelona' have been developing separate beehive projects.
 Recently, our initiatives have joined forces to implement two open source beehive designs; The 'Warre' and the 'Kenyan Top Bar' hive. These can be freely downloaded by the public and easily fabricated locally using CNC machines. Our open designs aim to remain cheap, effective and easy to assemble.

Additionally, we are working with OKNO in Brussels to create clear documentation and data analysis strategies, to ensure best beekeeping practices and to initiate a support network of advisors and workshops.

#opensourcebeehives