


Slideshow about the NeoBucher project story (English version, may 2015)

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The NeoBucher project story

The NéoBucher



The « NéoBucher » project
or the story of the rebirth of horse-draught multi-
tillage implement Bucher TM

By Non-profit organization Hippotese (2014-2015)



Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

01 : The **NeoBucher project** : story of the rebirth of horse draught multi-tillage implement Bucher TM.
This project, still in progress today, is supported by Hippotese. **Hippotese** is a French none-profit organization which **promotes draft equids power**.

Hippotese 1986-2015



CEP Savoie (group originated from the French Alps)
+ ARTAP Franche-Comté (group originated from the
French Jura mountains)

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HIPPOTESE

(Non-profit organization for the development, re-
search and experiments on draft horse technologies.)



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015

02 : Hippotese was founded in 1986 by the merger of two French personalities and two French organisations who have been positively committed to the use of draught horses. One came from Jura, and the other from Alps country (**Deny Fady chairman of CEP Savoie** and **Jean Louis Cannelle chairman of ARTAP Franche-Comté**).

The name "**HIPPOTESE**" means Hippomobile and Technology Experimentations from SouthEast France.

Hippotese 1986-2015

Modern use of draft horses promotion

- Technical research and development,
- Professional training,
- Collect and sharing of documentation,
- Setup of promotional events,
- Support of its members



The Blogspot

The
magazine
Hippobulle



The
NewsLetter
HippoNews



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« NéoBucher », Project history...


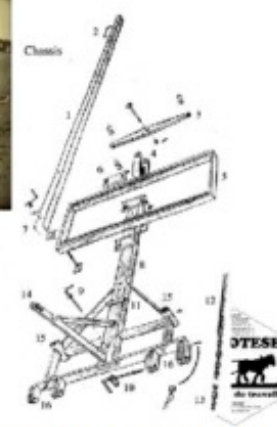
Hippotese 2014-2015

03 : Since 1986, **Hippotese** conducts **technical research** (about collars, harnesses, horse-drawn vehicles and equipment for agricultural, forestry and urban uses...), offers **professional training**, **collects and spreads historical and technical documentation** (on its website, on its blogspot, in its **Hippobulle-newspaper** and its monthly **HippoNews-newsletter**), **organizes promotional events** about horse draft power and **supports its**

members in their activities (loan of equipment, collective self-help projects, helping hands...).

« Bucher » The multi-tool cultivator

- Produced by **Bucher Guyer AG**, from 1930 until 1960
- Open-field vegetable crops and market gardening
- Easily producible frame / toolbar-lifting system

Deny Fady
« NéoBucher », Project history...
Hippotese 2014-2015

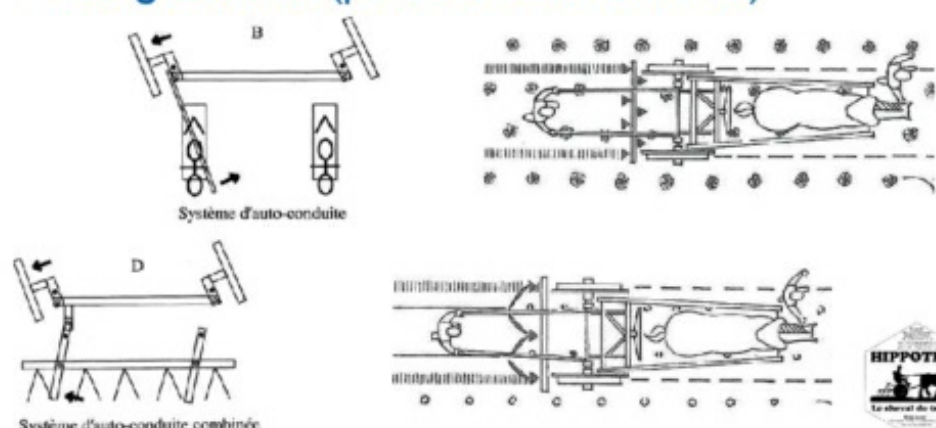
04 : The **Bucher (Bucher Guyer AG) horse draught multi-tillage implement** had been available since the 30's. It had been manufactured until the 60's.

It is an implement for **open-field vegetable** crops and **market gardening**.

It has simple and easily constructible frame and lightweight design. It is equipped with a **toolbar-lifting system**.

« Bucher » The multi-tool cultivator

- **2 rows at once** (3 ranks available),
- **2 path correcting systems**,
- **single horse** (possible with 2 horses)



Deny Fady
« NéoBucher », Project history...
Hippotese 2014-2015


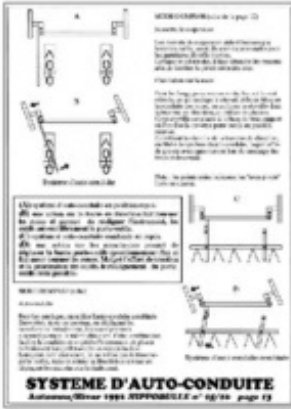

05 : The Bucher possesses rare qualities, such as the **possibility to till 2 rows at once** (3 ranks available), and **2 path correcting systems** so tillage can be very precise.


Besides, when changing from one kind of tillage to another, users change the whole tool-bar very easily, without

taking of each tool, and so without changing set-space between tools.
It can be **draft by a single horse**, or a pair.

« Bucher » The multi-tool cultivator

- Discovered in 1990 by Hippotese
- Release and share of its handbook (Hippobulle)
- Do we Rebuild the cultivator ?



Deny Fady
« NéoBucher », Project history...
Hippotese 2014-2015

06 : Hippotese discovered the Bucher in the 90's, and published a **first technical documentation in 1992** in our magazine **Hippobulle** n°15-16.
In 2006, on Hippotese's blog, we wondered about re-manufacturing this implement, with no answer to this question.

« Bucher » The multi-tool cultivator

- Since 2007 to 2008, importation by Hippotese of dozens of second-hand Bucher from Switzerland
- We must rebuild this cultivator !







Deny Fady
« NéoBucher », Project history...
Hippotese 2014-2015

07 : Between 2007 and 2008, we imported dozens of second-hand Buchers from Switzerland, until we couldn't get any more.

Again, we wondered about re-manufacturing, but without trying anything to that point yet.

« Bucher » The multi-tool cultivator

- Since 2010, few market gardening implements
- None was really based on the Bucher
(1 horse, 2 rows and path correcting system)



Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

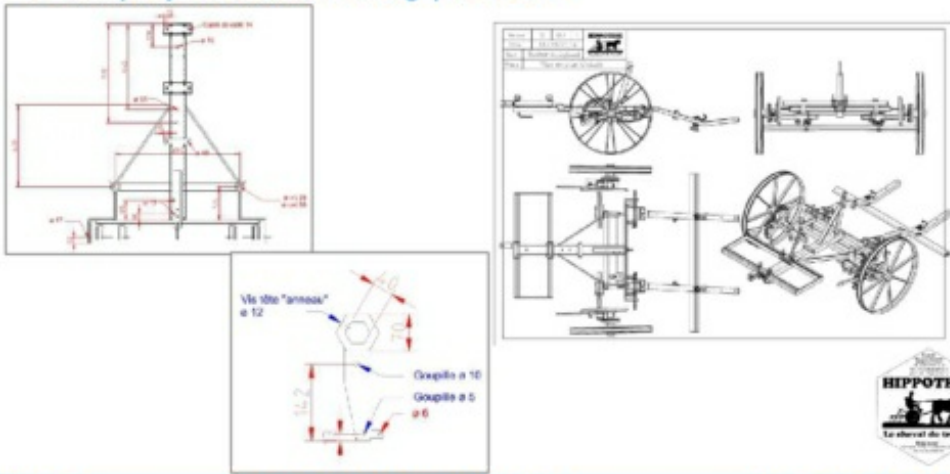
08 : Then, since 2010, many people have been creating market gardening implements, **but none was really based on the Bucher.**

It seemed quite stupid to us to try and re-invent something that already existed, that had been improved during many years, which was at once very simple and very sophisticated, and which was quite simple to copy.

Moreover, none of these new multi-tillage implements met the **three main functions of the Bucher : 1 horse, 2 rows and path correcting system..**

« Bucher » The multi-tool cultivator

- July 2014, technical drawings of the existing Bucher
- Redesign engineering in order to limit metal profiles and to simplify manufacturing process



Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

09 : On July 2014, we decided to pay a craftsman to **draw the (original) Bucher technical drawings**

(**manufacturing diagrams**), so we could share them with anybody who would like to built a new one, identical to the old one.

Secondly, from these first technical drawings, **we tried and simplified the manufacturing pattern**, using as few as possible different shaped metal bars and **limiting the number of sections of metal profiles used**.

Then, we thought about changing a few particular parts which used to be in cast iron, so they could be crafted only by welding from usual shaped metal bars.

A New version : the « NéoBucher »

- Oct 2014, Hippotese + Atelier-Paysan
- Specifications of the "NéoBucher"



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015

10 : In October 2014, next step was to slightly improve the original model, to adapt this implement to our uses.

And so, from simply copying the Bucher, **now we were working on a Neo-Bucher project !**

We gathered as many Bucher users as we could – about 20 people- to produced guidelines about what should be kept identical, and what should be changed.

That is when we took the **society of Cooperative Interest "L'Atelier Paysan"** as a partner on this project.

L'Atelier Paysan has technical knowledge and experience on designing self-manufacturable market gardening implements.

Together we have sought simple, efficient and reliable solutions (original or not) to the building of the NeoBucher.

The NéoBucher

- Under free licence " **Creative Common** "
- Self-made production friendly
- Craft production also possible



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015

11 : We decided :

- to spread on **free license "Creative common"** what we would achieved,
- to allow **market gardeners to self-manufacture their own implement**, by offering formative sessions organised by L'Atelier Paysan,
- to allow **professional craftsmen to manufacture parts or whole implements** for people who would like to buy them ready to use.

The NéoBucher

Appropriate technology :

- Arc welding machine
- Angle grinder
- Bench drill
- Common metal profiles



Simplified design !



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015


12 : We decided to find building solutions adapted to the equipment of a **farm basic mechanical workshop**.
Namely : **a arc welding machine, a angle grinder, a bench drill and usual metal profiles**.
We don't cross out the possibility to achieve a few complex parts (turning, laser cutting ...) with external

craftsmen.

This solution allows to built NeoBuchers worldwide using local technical means.

The NéoBucher

- **Axel**, mechanical engineer student at l'Atelier Paysan, 4 months.
- **Research and development** leading to **3D drawings** in accordance of **specifications**.
- **Massive interaction** between members (20 pers)



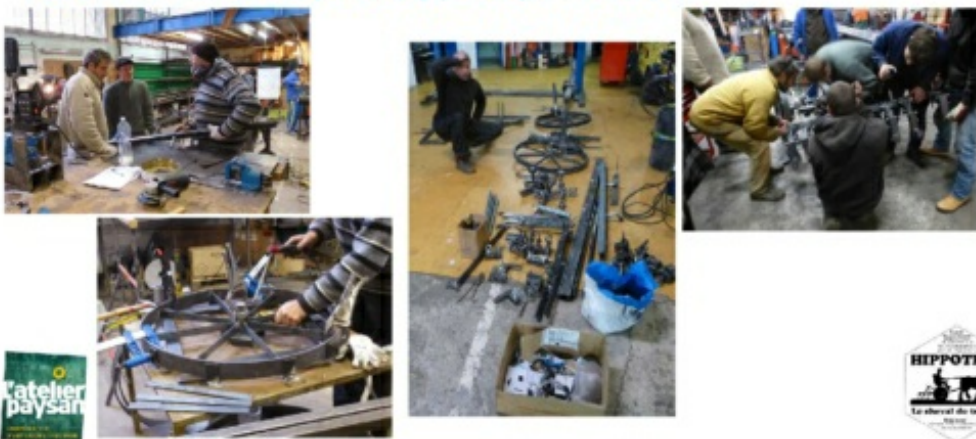
Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

13 : From October 2014 to January 2015, **Axel, an engineer student** doing an internship at l'Atelier Paysan, accepted to work on technical solutions to our guidelines, on the **3D technical drawings** for both versions of the Bucher, discussing his work with us at each step.

Many exchanges took place between members of the working group (Hippotese, l'Atelier Paysan and Bucher users). **They brought simple technical solutions, some inspired by other efficient implements, some entirely new. Only the best ones were kept.**

The NéoBucher

- **February 2015**, self-made production workshop
- **13 people**, 3 days, + 300 hours
- **2 NéoBucher prototypes produced**





Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

14 : In February 2015, a first **self-manufacturing workshop was organised** with 13 people plus Axel and his boss Joseph.

In 3 days, (and more than 300 hours of work), 2 identical prototypes were produced, which proved the chosen technical solutions feasibility.

The NéoBucher

End of february 2015, NéoBucher final finishing for
2015's International Agriculture Show in Paris



Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

15 : In the process, **Hippotese was asked to present**, 15 days later, a **Neo-Bucher prototype at the 2015's International Agriculture Show in Paris**. We hasten to make one prototype presentable.

The NéoBucher

March 2015, product demonstration at Paris



Deny Fady « NéoBucher », Project history... Hippotese 2014-2015

16 : Early March 2015, **the prototype (number 002) had been presented twice at the "Innovative Horse-Drawn Equipment Demonstrations", in front of the French Minister for Agriculture.**

The NéoBucher

March 2015, crow-funding project launched through the web site **KissKissBankBank.com**



17 : Mid-March 2015, Hippotese touched the bottom of its self-funding capacities.

So **we launched a crow-funding project through the web site KissKissBankBank.com**, hoping to collect enough money to equip the new tool-bars with tools from manufacturers, and to start the first real-conditions tests at spring.

The NéoBucher

March 2015, introduction of the project and related prototype at the FECTU AGM (The European Draught Horse Federation) in Italy



18 : End of March 2015, **we presented one this same 002 prototype and the "NeoBucher Project" at the FECTU Annual General Meeting** (European Federation for Draught Animals) in Italy, to our European friends.

The NéoBucher

April 2015, NeoBucher improvement engineering, especially on the lift system and toolbar during the farm-workshop (Nicolas Koziel's farm)



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015

19: On April 2015, **we organized a 2 days workshop** to make changes and improvements on the 002 prototype, especially on the lifting system and the toolbar. This **workshop took place in a market gardening and aromatic and medicinal plants farm** where the 002 prototype will stay to be tested for the whole season.

The NéoBucher

May 2015, intensive real-conditions tests in organic growing behavior (aromatic and medicinal plants)



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« NéoBucher », Project history...

Hippotese 2014-2015

20 : On May 2015, **intensive real-conditions tests started. And results are hopeful...**

The future of the NéoBucher project

- May-sept 2015 : Continue real-conditions tests
- Sept 2015 : Tech & Bio organic show
- Oct 2015 : Keep Improving the prototype
- End of 2015 : Final drawings and tutorials
- Beginning of 2016 : First craft production training and promotion

Follow the project...

Blog : <http://hippotese.fr>



Thanks to Nina Passicot et Jérôme Wentzel for English version



Deny Fady

« NéoBucher », Project history...

Hippotese 2014-2015

21 : Which is still to be done...

- We plan to **test and develop the prototypes from May to September, 2015.**
- Mid-September 2015, **the NeoBucher will be presented at the Tech & Bio organic show** in Valence (South-East of France).
- From October 2015 to the end of 2015, **we will prepare the final Neo-Bucher technical drawings and manufacturing tutorial.**
- Early 2016: We hope to **spread drawings and organize the first training for self-building this horse-draught multi-tillage implement.**

Follow the project on the Hippotese website : <http://hippotese.fr>

Deny Fady, Chairman of Hippotese, may 2015

(Special thanks to Nina et Jérôme for translate)

The crow-funding effort for this project will end on May 26, 7h32 pm, we hope to reach our goal of 7000 euros, which will allow Hippotese to keep working on this project.

NB : crow-funding adress : <http://www.kisskissbankbank.com/neo-bucher-traction-animale-et-innovation>