



ICA2018

11th International Congress on Aerobiology
3-7 September 2018, Parma, Italy

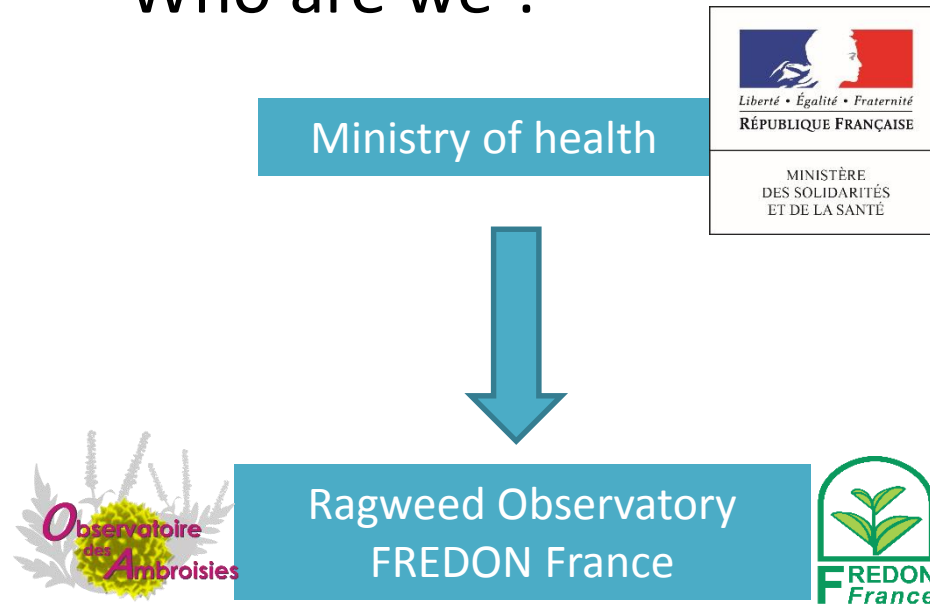
What territorial strategy for *Ambrosia* management in France ?

Marilou MOTTET, Sarah LABRUYERE

French Ragweed Observatory – FREDON France
Paris



Who are we ?

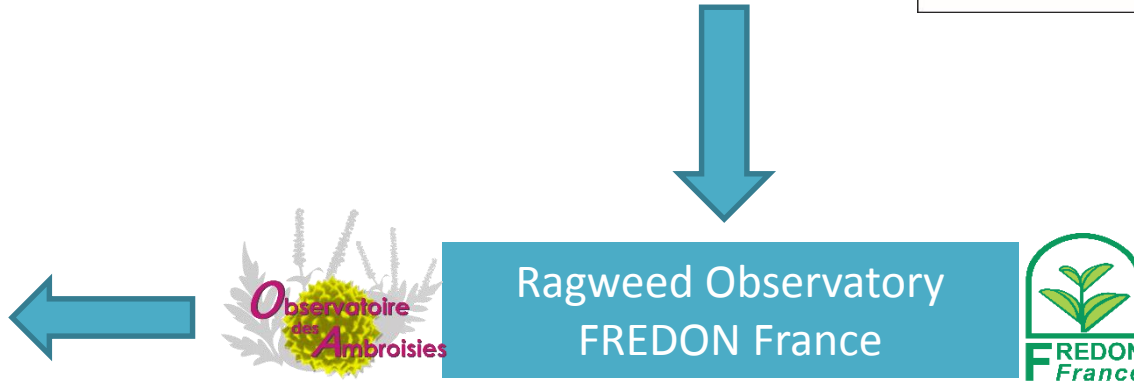


Who are we ?

Others ministries



Ministry of health



Who are we ?

Others ministries



Ministry of health



Ragweed Observatory FREDON France



Partners



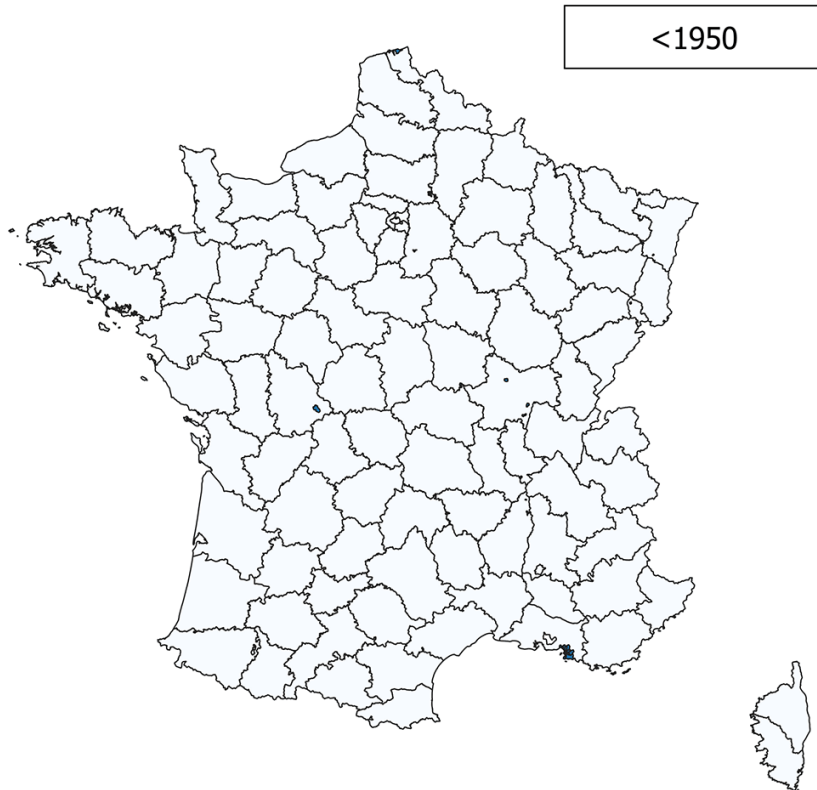
Etc.

What territorial strategy for *Ambrosia* spp. management in France ?

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Context – Invasion of *A. artemisiifolia* in France



First discovery in 1863



Context – Health impacts of *A. artemisiifolia*

In **Auvergne-Rhône-Alpes region** (most invaded region) :



+ 600,000 allergic people

+ 40.6 M€ of health care costs



Context – Health impacts of *A. artemisiifolia*

AMBROSIA

WHAT IF AMBROSIA INVADED ALL OVER FRANCE AS MUCH AS AUVERGNE-RHONE-ALPES REGION?

WORST CASE SCENARIO



**AMBROSIA IS A DANGER
FOR OUR HEALTH
LET'S ACT BEFORE
IT'S TOO LATE**

www.ambroisie.info



What if common ragweed invaded all over France ?

5.3 millions of allergic people

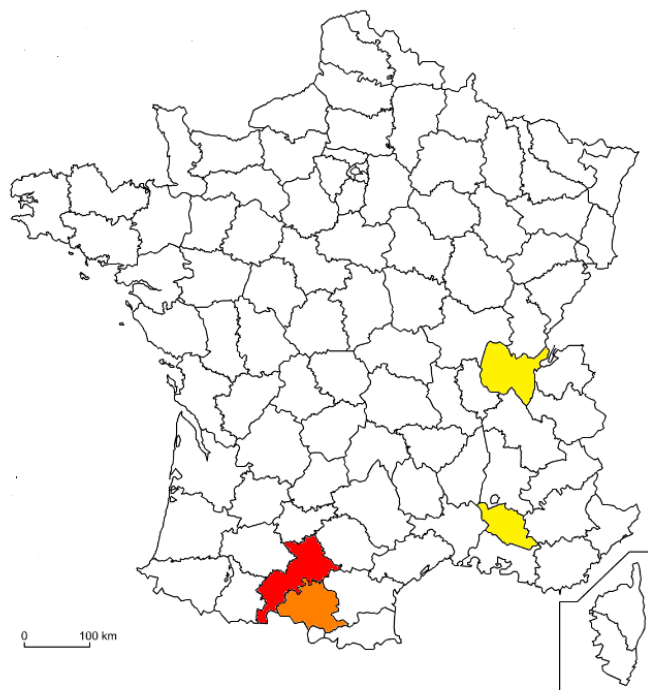
329 M€ of health care costs

What territorial strategy for *Ambrosia spp.* management in France ?

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Context - Another problematic ragweed in France : *Ambrosia trifida* L.

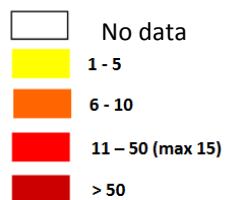


Chauvel B. et al. 2015.. Journal de Botanique de la Société Botanique de France, 71, 25-38



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Number of occurrence
per department



ANSES Opinion

**Risk analysis relating to the giant ragweed (*Ambrosia trifida* L.) in order to
formulate management recommendations (2017)**

- “Impact on contaminated plots is very rapid and can result in the total loss of the harvest and additional management costs for the plot”.
- “*A. trifida* contributes to the presence in the atmosphere of allergenic pollen that will only aggravate the issue of pollen-related allergies”



New national strategy to control expansion of *Ambrosia spp.* in France



2017: Publication of a **decree** about management of three *Ambrosia sp.*
→ **obligation to destroy *Ambrosia sp.* in all habitats**



***Ambrosia
artemisiifolia* L.**



***Ambrosia
trifida* L.**



***Ambrosia
psilostachya* DC.**

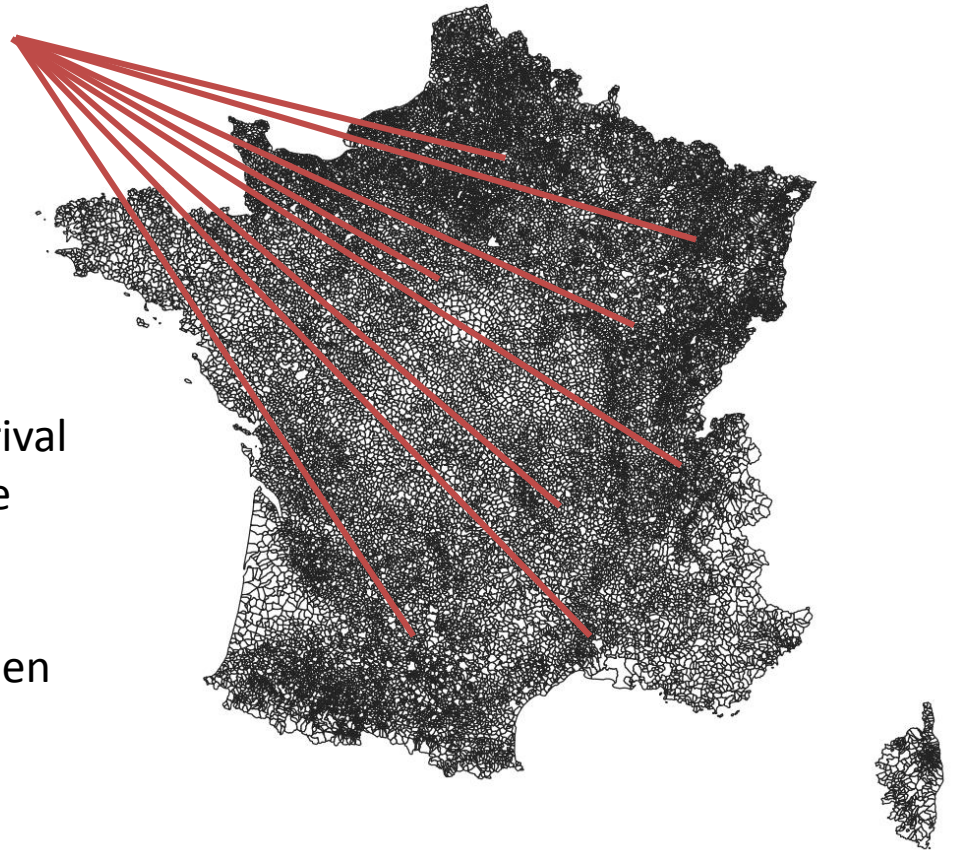
New national strategy to control expansion of *Ambrosia spp.* in France



→ « Local referent for *Ambrosia* »
in every municipality

Missions :

- Keep watching for *Ambrosia sp.* arrival
- Inform public about *Ambrosia* issue and how to destroy it
- Make sure it is managed
- Make sure it doesn't spread its pollen



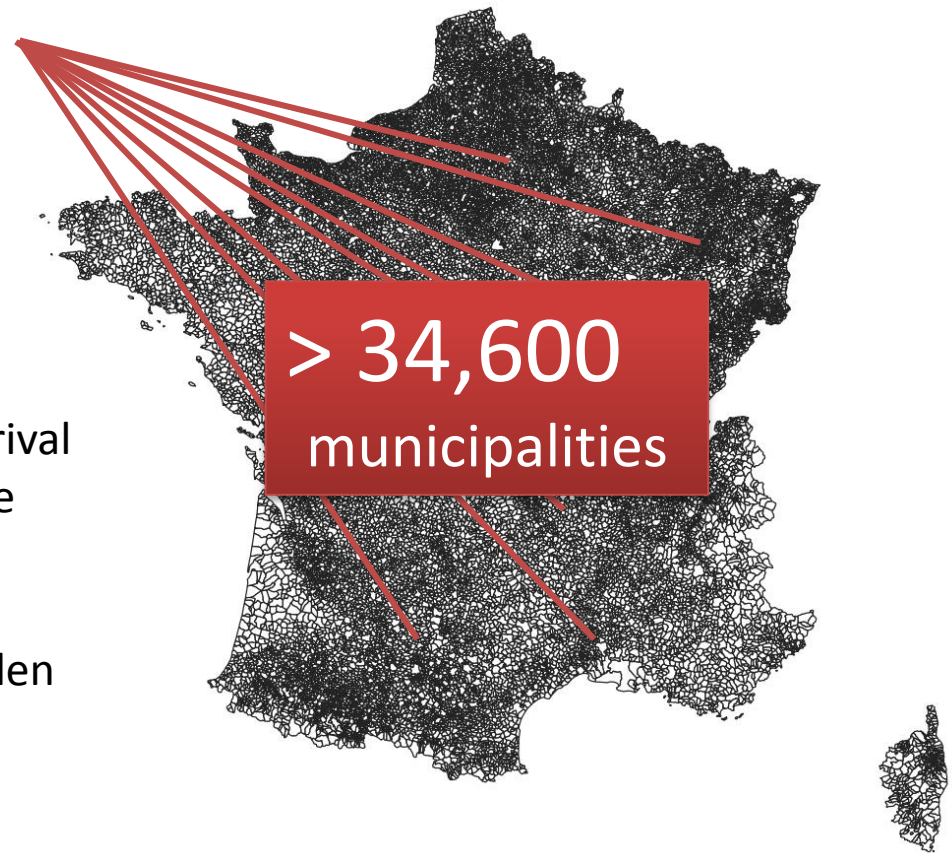
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New national strategy to control expansion of *Ambrosia spp.* in France

→ « Departmental referent for *Ambrosia* » in every department

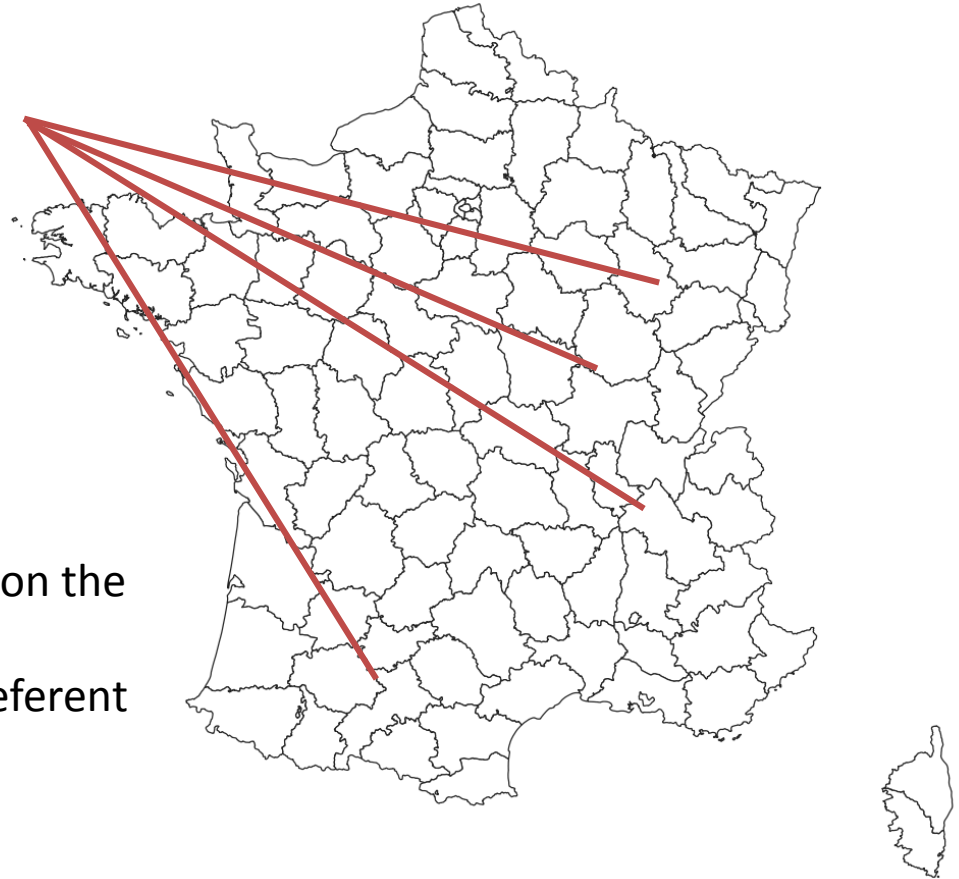


local offices of the Ministry of health (or delegates)



Missions :

- Lead on the fighting against *Ambrosia* on the department
- Help municipalities nominate a local referent
- Train « local referent »
- Inform people






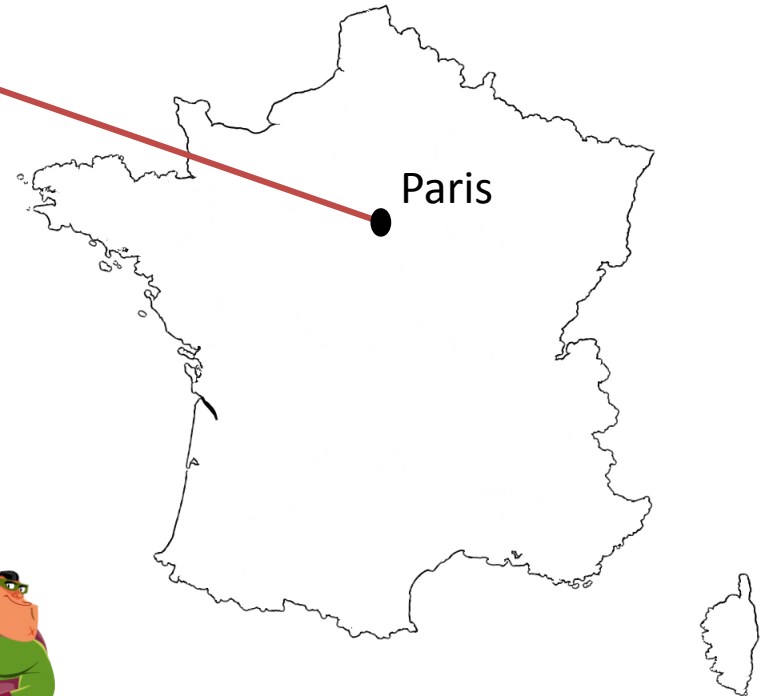
New national strategy to control expansion of *Ambrosia* spp. in France

→ « Ragweed Observatory »



Missions :

- Inform people   
- Help and train “departmental referent”
- Lookout for scientific works
- Create documentation and tools



=> Guidebook, information letter, backboard, recognition card, practical documentation, educational tools, etc.

Useful tool: Reporting platform for *Ambrosia*

Free smartphone application available on Apple Store and Google Play, web site, by mail or phone

Everyone can report *Ambrosia* population !



1 Report all *Ambrosia* you have seen on your smartphone or on signalement-ambroisie.fr website

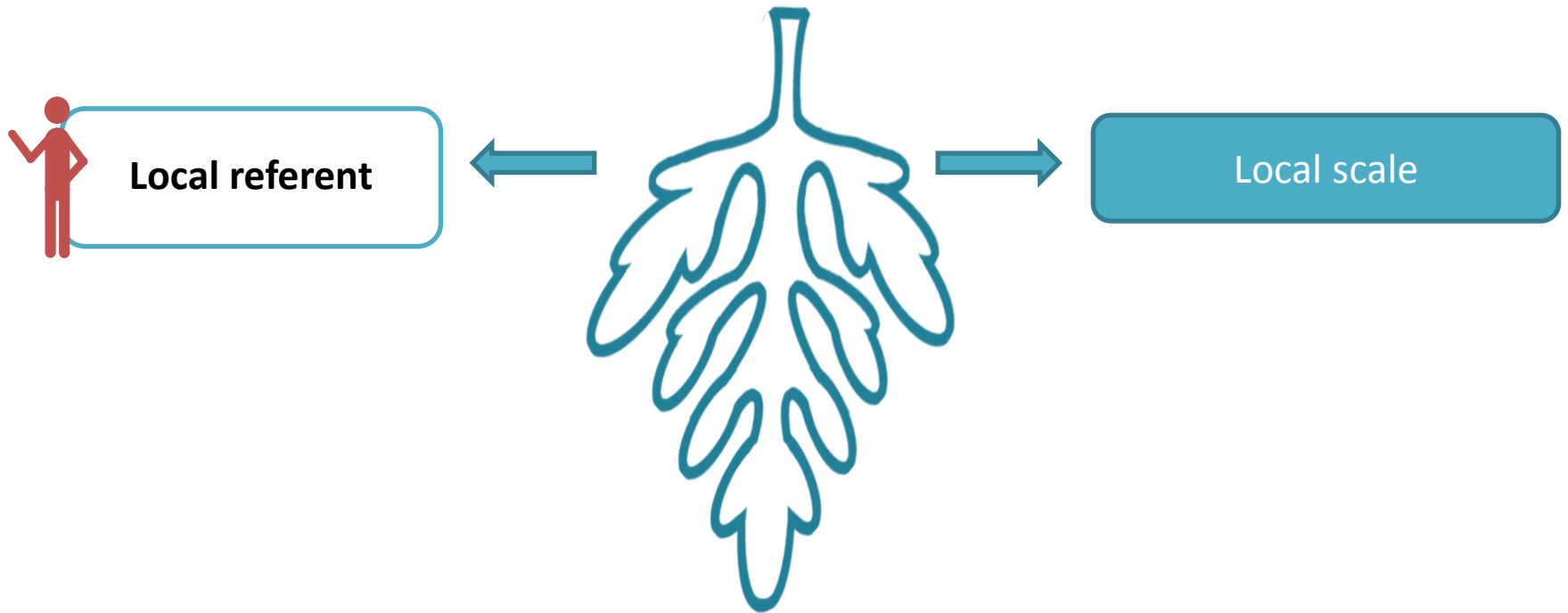
2 Your report is sent to the local referent for *Ambrosia*

3 He will make sure that *Ambrosia* you reported will be managed



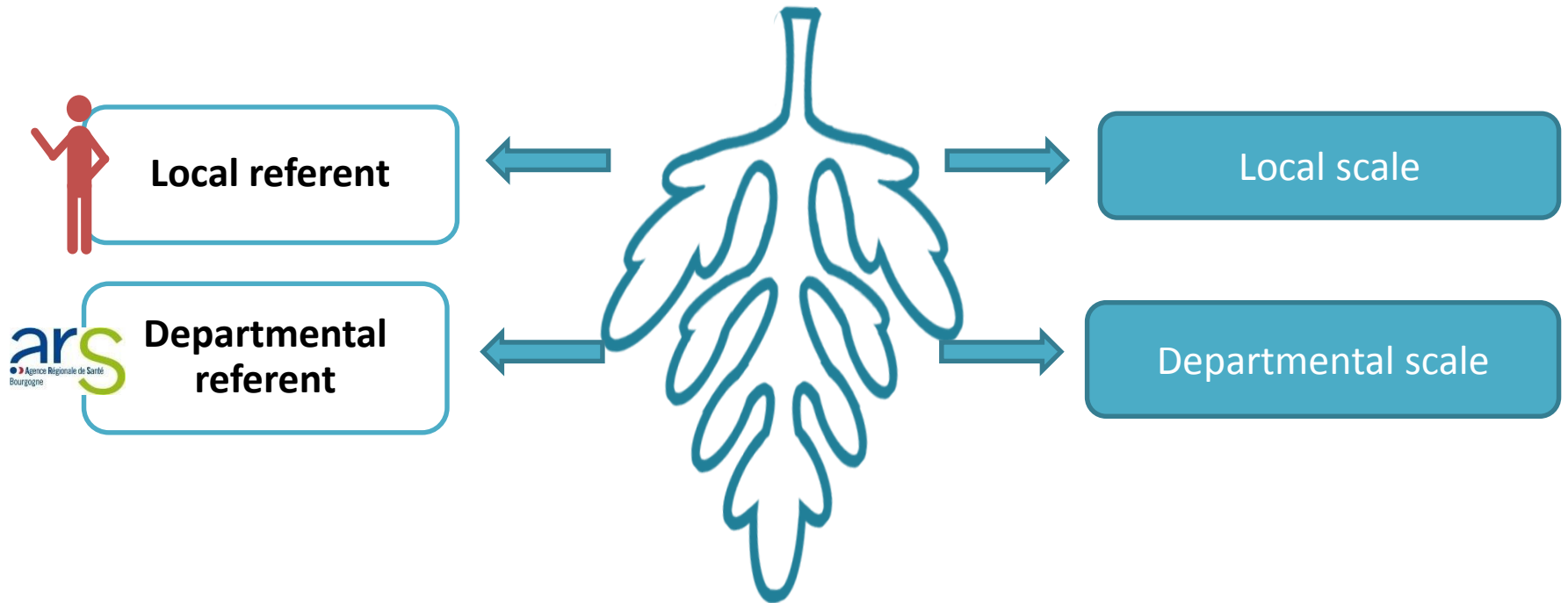
New national strategy to control expansion of *Ambrosia spp.* in France

Multi-scale organisation for the survey and management



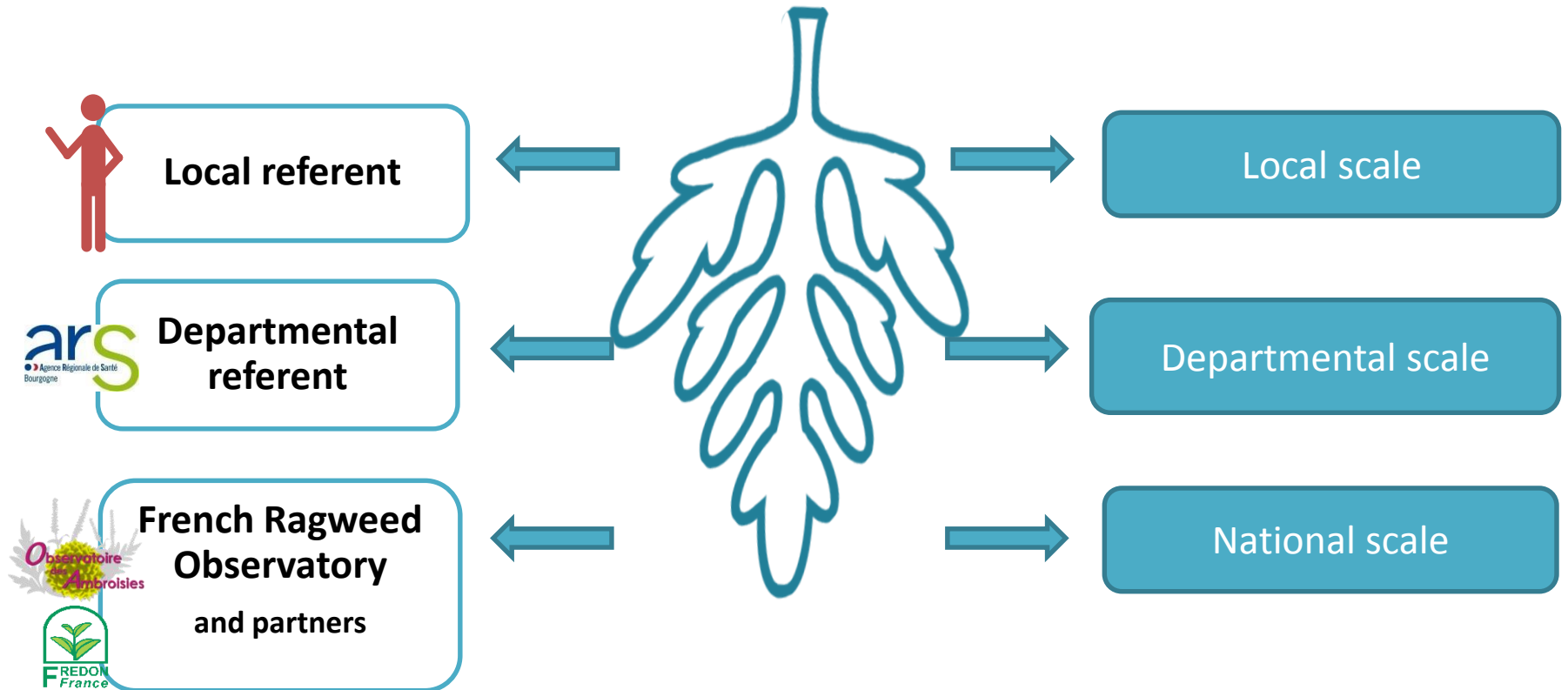
New national strategy to control expansion of *Ambrosia spp.* in France

Multi-scale organisation for the survey and management



New national strategy to control expansion of *Ambrosia spp.* in France

Multi-scale organisation for the survey and management



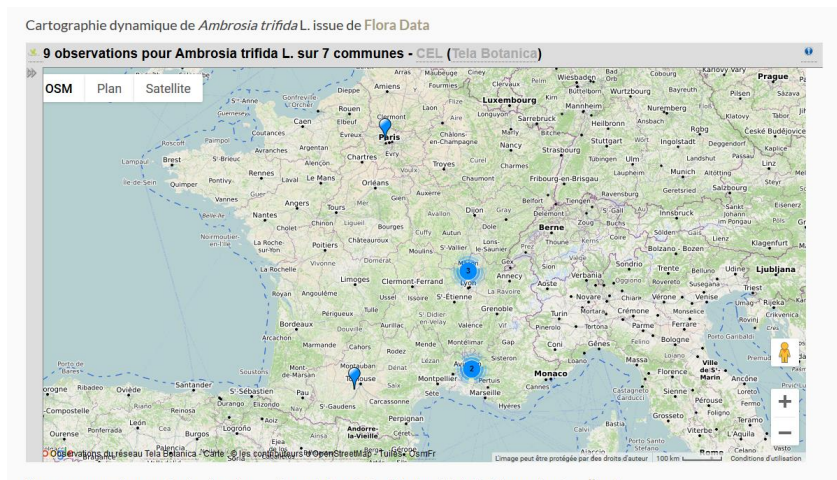
Specific *Ambrosia trifida* actions

- less widespread
- management recommendations The French Agency for Food, Environmental and Occupational Health & Safety (Anses)

=> In 2018, different partners started a “citizen science” mission to gather better information about the repartition of the plant.



Map of detection of *Ambrosia trifida* on Flora Data



Partners :



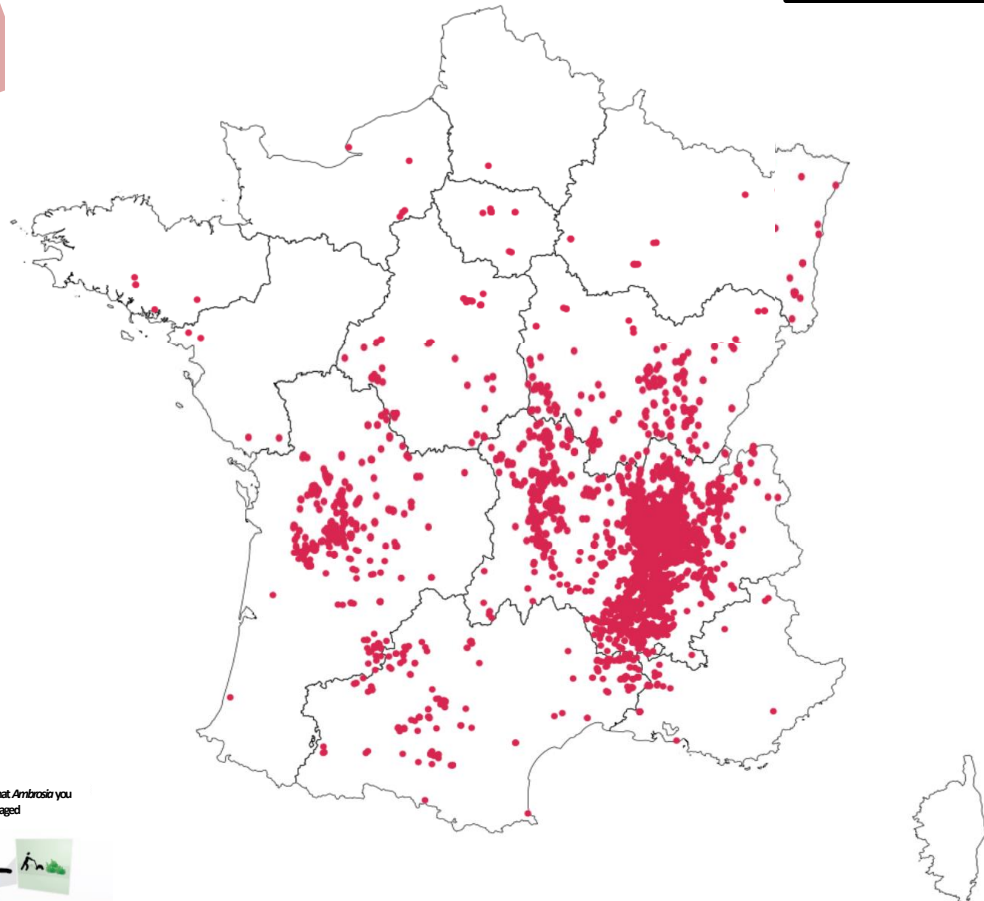
So... where are we now ?

Reporting platform for Ambrosia



Citizen science
results for 2018

2018



PLATEFORME INTERACTIVE
SIGNALEMENT
AMBROISIE

1

Report all Ambrosia you have seen on
your smartphone or on
signalement-ambrosie.fr website

2

Your report is sent to the local
referent for Ambrosia

3

He will make sure that Ambrosia you
reported will be managed



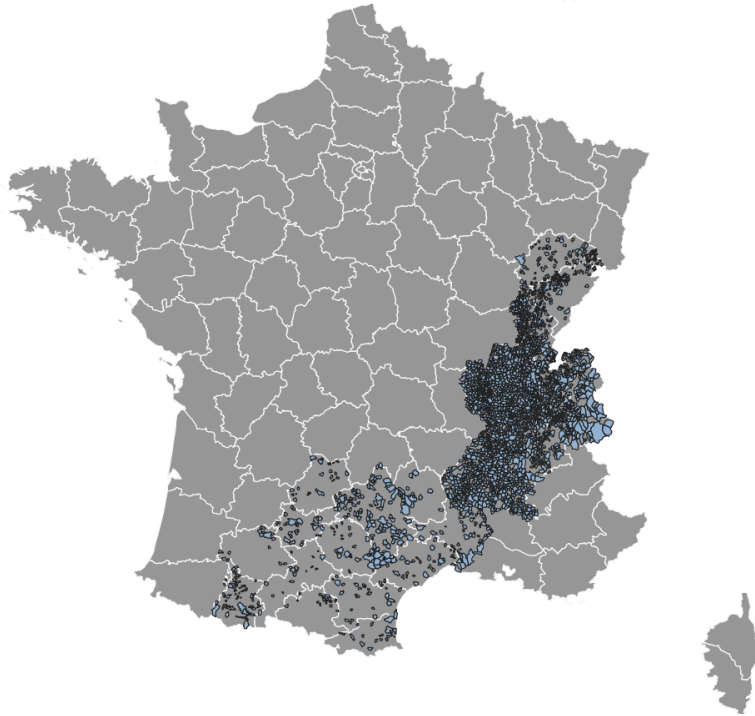
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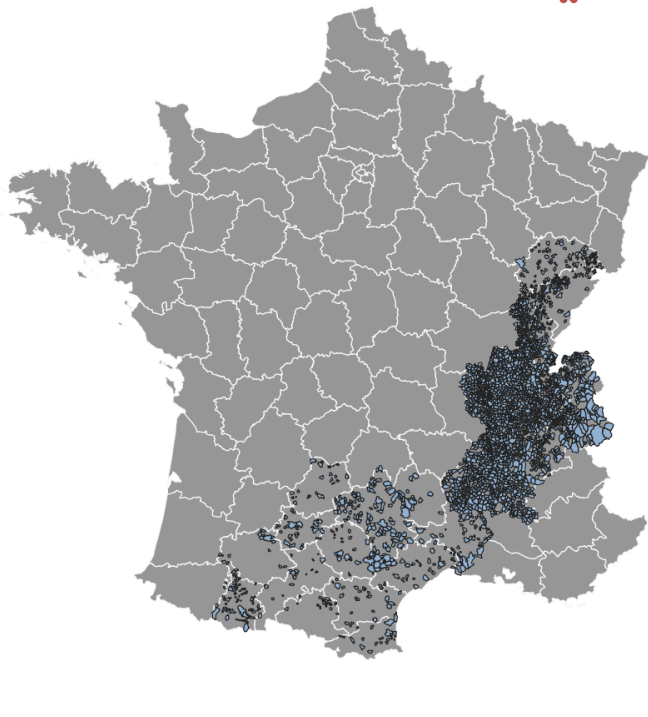
So... where are we now ?

Repartition of **local referent** 



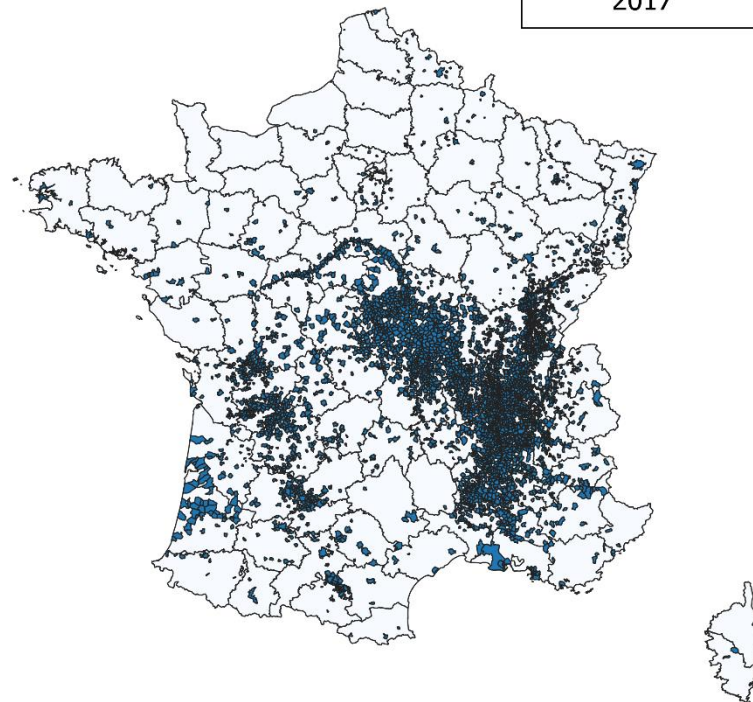
So... where are we now ?

Repartition of **local referent** 



Repartition of *Ambrosia artemisiifolia* 

2017

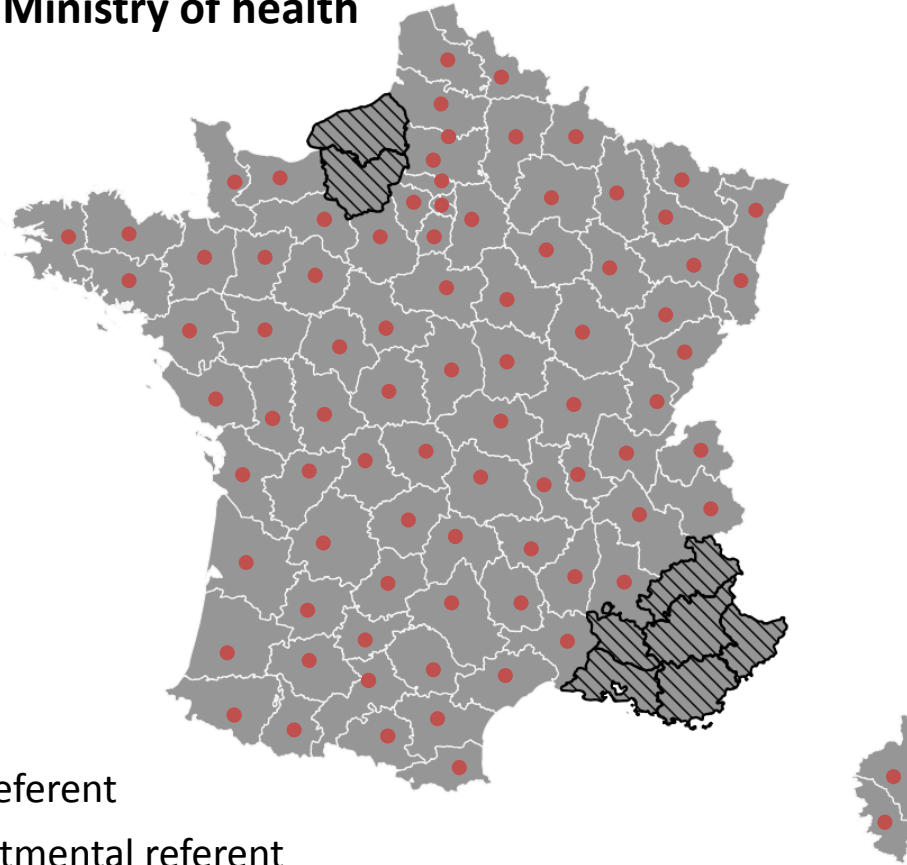


To be continued....

So... where are we now ?

Repartition of **departmental referent**

→ local offices of the Ministry of health



No departmental referent



Presence of a departmental referent

Take home messages



- *Ambrosia artemisiifolia* : real issue in France
- *Ambrosia trifida* : emerging organism associated with high risks
- New legislation framework : Obligation to destroy three *Ambrosia* species
- Management at different scales:
 - ✓ Local referent
 - ✓ Departmental referent
 - ✓ French Ragweed Observatory (National resources center on ragweed species)
- Lot of things to do
- Coordination of all protagonists is essential !



Thank you for your attention



Useful links :



Website of French Ragweed Observatory (in french) : ambroisie.info



Follow us !



National Network of Aerobiologic Survey : pollens.fr



French Foundation For Ragweed Study (AFEDA): ambroisie-afeda.org

For any questions : observatoire.ambroisie@fredon-france.org