

Apimondia

*“Bees Caring for Europeans
Europeans Caring for Bees?”*

Philip McCabe
Apimondia President



Current Situation

- ▶ **1. Abnormal bee colony mortality**
- ▶ **2. 600,000 Beekeepers in Europe looking for answers**
- ▶ **3. Catastrophic loss of all insects**
- ▶ **4. Less and less pollinators**
- ▶ **5. We are walking, eyes wide open, into an abyss**



Main problem

- ▶ 1. Abnormal bee colony mortality

A close-up photograph showing a large number of dead bees scattered across a dry, sandy, and dusty ground. The bees are in various positions, some on their backs, some on their sides, and some with their wings spread. The background is a bright, sunny outdoor setting with some greenery visible in the distance.

WHY?



Insecticides & Pesticides

New generations of molecules + their metabolites





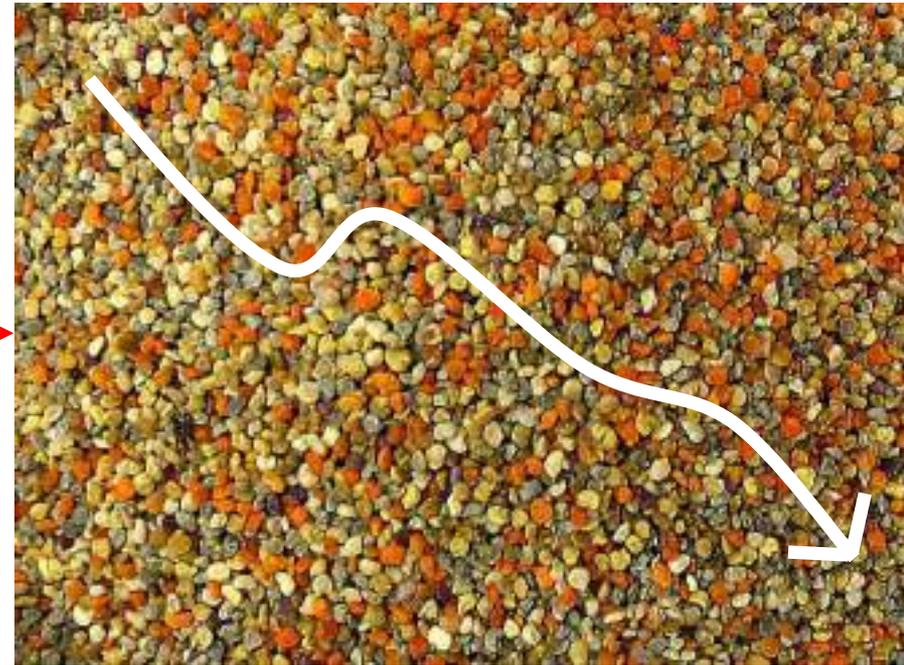
Toxicity / Bees (LD50 ng/bee) - Dr. JM Bonmatin (CNRS) France

pesticide	®	utilisation	DL50 ng/ab	Tox/DDT
DDT	Dinocide	insecticide	27 000,0	
amitraze	Apivar	i/acaricide	12 000,0	
coumaphos	Perizin	i/acaricide	3 000,0	
tau-fluvalinate*	Apistan	i/acaricide	2 000,0	
methiocarb	Mesurol	insecticide	230,0	
carbofuran	Curater	insecticide	160,0	
λ-cyhalothrine	Karate	insecticide	38,0	
deltamethrine	Décis	insecticide	10,0	
thiaméthoxam	Cruiser	insecticide	5,0	
fipronil	Regent	insecticide	4,2	
clothianidine	Poncho	insecticide	4,0	
imidaclopride	Gaucho	insecticide	3,7	



Bee diet

Decrease of pollen sources



Monocultures + weedkillers

**We don't like
green deserts**



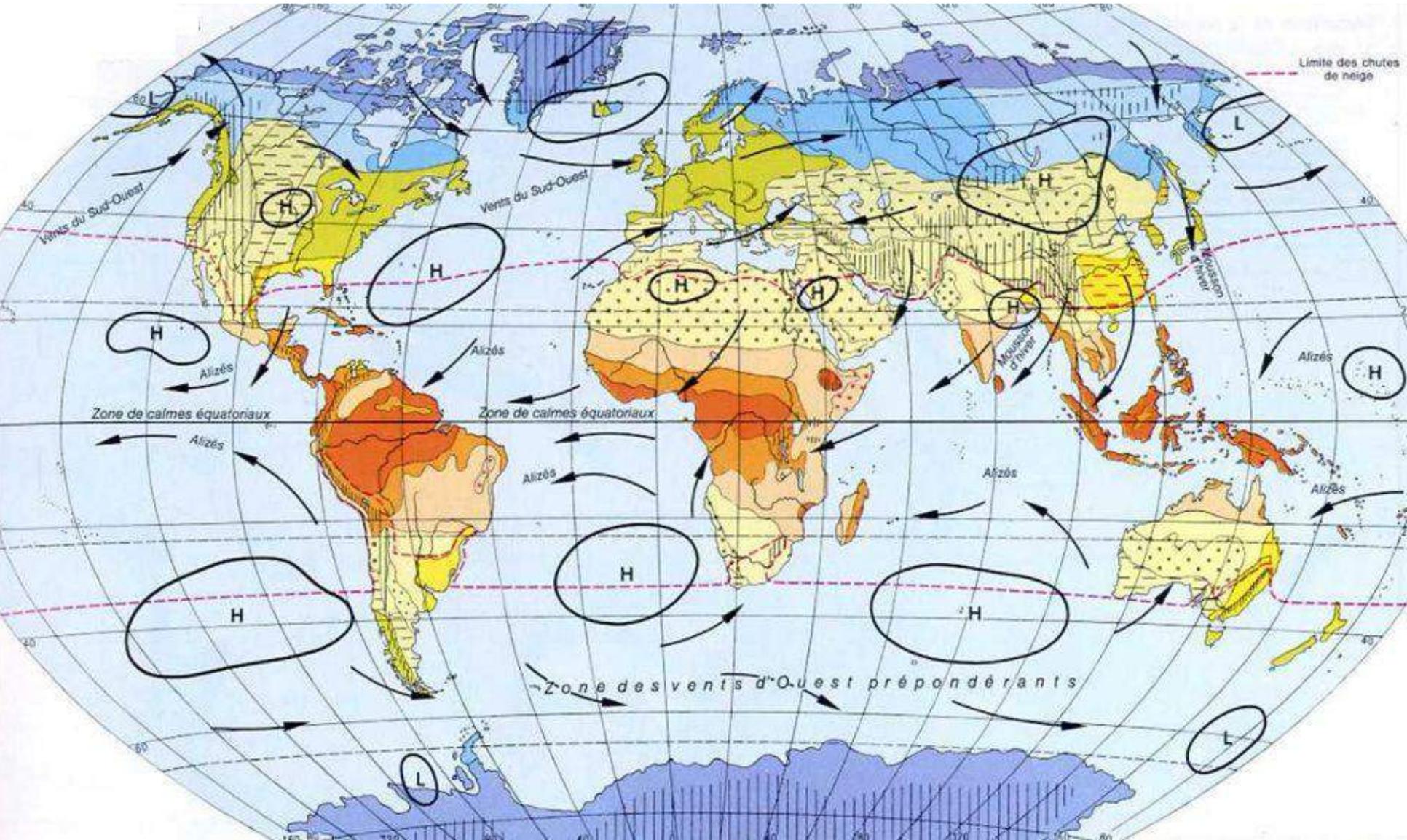


Varroas





Climate changes





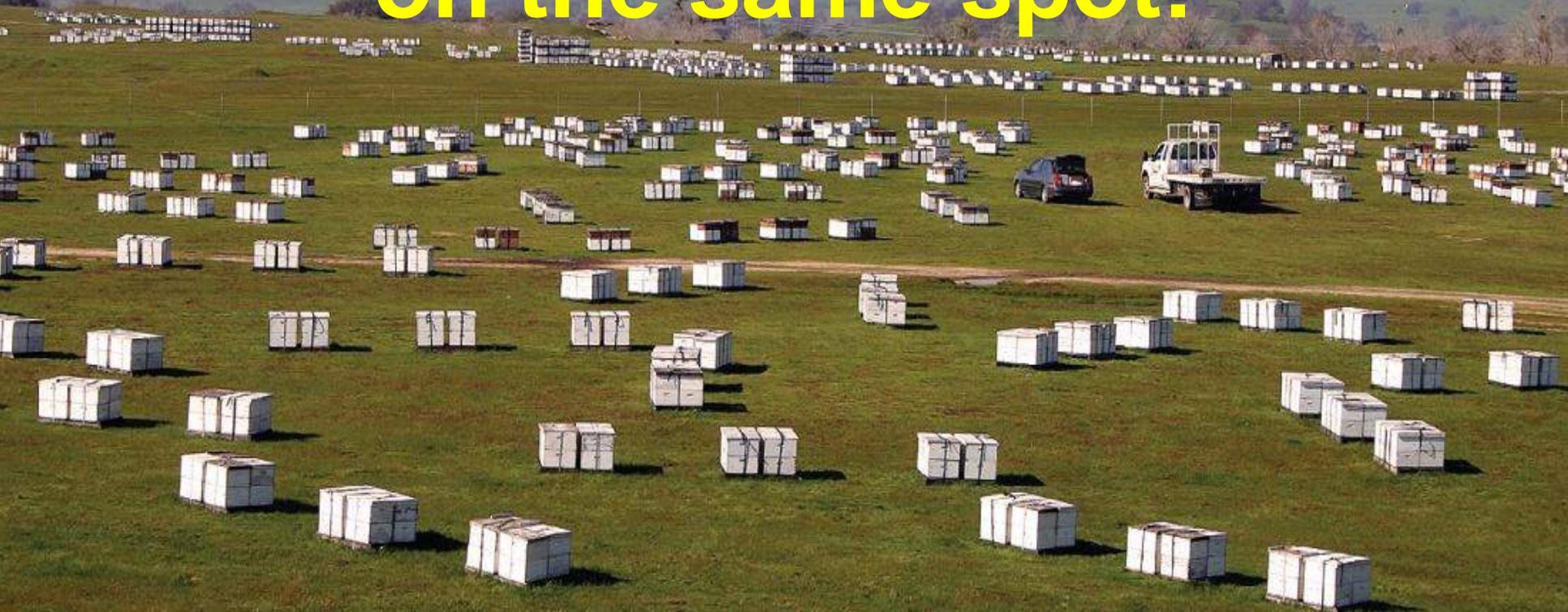


Colony management

- ▶ Multiplication of migration = stress of the colonies
- ▶ Social concentration = overgrazing + unhealthy environment

Major U. S. Migratory Routes

Thousands of beehives on the same spot!





Future problems

► New generations of pesticides





► SO4: Ensure inclusive and efficient agricultural and food systems



Your produce choices
without bees



To promote management under Organic Standards

To eliminate a large part of bee losses factors

Belgium (private) 	Denmark (state) 	Germany (state) 
Netherlands (state) 	Norway (private) 	Austria (state) 
Switzerland (private) 	Finland (state) 	France (state) 
Spain (state) 	Czech Republic (state) 	Sweden (private) 



UNEP Report (2010)

UNEP Emerging Issues: Global Honey Bee Colony Disorder and Other Threats to Insect Pollinators

The FAO estimates:

- Out of **100 crop species** which provide **90% of food** worldwide, **71 of these are bee-pollinated**.

In Europe:

- **84%** of the **264 crop species** are animal-pollinated
- **4,000** vegetable varieties exist thanks to pollination by bees.
- The production value of **one ton** of pollinator-dependent crop is approximately **five times** higher than one of those crop categories that do not depend on insects.



Flora & Pollination

Bee Health

Biology

Economy

Africa

Asia

Technology & Quality

Europe

Apitherapy

Oceania

Rural Develop.

The Americas

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