



Kingdom of Morocco
Ministry of National Education
Preschool and Sports



مؤسسة محمد السادس لحماية البيئة
FONDATION MOHAMMED VI
POUR LA PROTECTION DE L'ENVIRONNEMENT



الأكاديمية الجهوية للتربية والتكوين
جهة درعة تافيلالت
A R E F D T



Jeunes reporters
pour l'environnement

20^{ème}
Édition



Youth for the environment 2022

Press Report

Realized By: **Kich Yassine**
Under the supervision of the teacher:
Abdelaaziz El Yamani



bees in Ghris

Why do Bees disappear?



*A report
concerning
the phenomenon
of
the disappearance
of bees in
Goulmima city*

presented by: Kich Yassine

disappearance of bees



A picture of a beehive from Abd al-Salam's apiary

Bees are social insects that live in organized groups, working as a unit to maintain their species, and to serve the ecosystems where they live. The importance of wild bees of all kinds lies in their ability to pollinate flowers, which constitutes the cornerstone of plant reproduction, and thus the maintenance of natural ecosystems and the production of fruits important for human and animal's nutrition. Urbanization, excessive use of pesticides, and climate change are the main factors threatening bees. Hence, This has led to the inclusion of some of these species on the Red List of Threatened Species by the International Union for Conservation of Nature (IUCN)

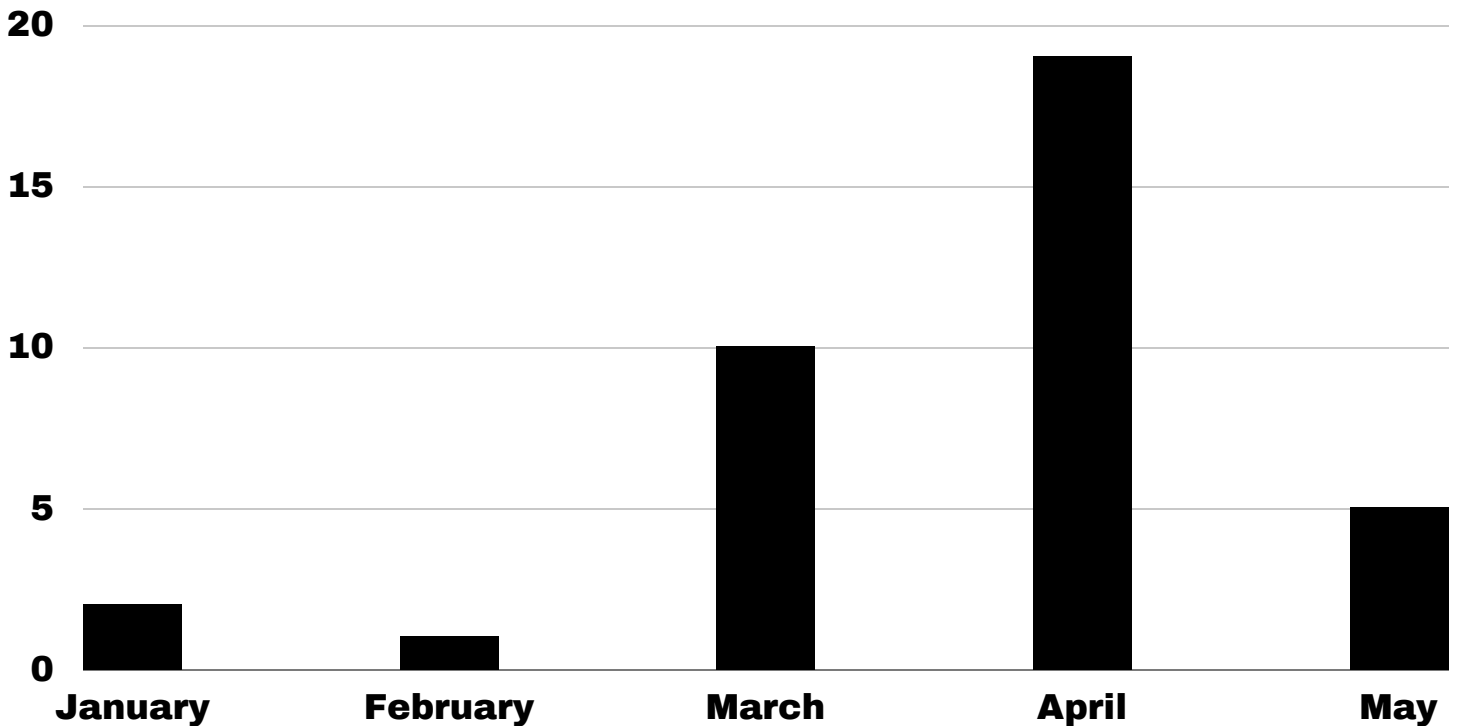
THE PHENOMENON OF THE DISAPPEARANCE OF BEES IN GOULMIMA CITY

Last year, Goulmima detected a weird phenomenon, which has become known as the "sudden disappearance of bees" which caused huge losses to the beekeepers in the Ghris area. So we interviewed Abd al-Salam, a beekeeper in "Ayt Gtou", who gave rough statements and statistics about the number of beehives that disappeared during this year 2021/2022



A picture of Yassin kich inspecting one of the beehives

Statistics from Abd al-Salam's apiary



A STATISTICAL REPRESENTATION OF THE NUMBER OF HIVES THAT DISAPPEARED FROM JANUARY TO MAY 2021

Abd al-Salam mentioned that the most important possible reason behind the disappearance of bees during this period is the **Merops bird**.

Abd al-Salam also mentioned that it is possible that the cause of the disappearance of bees is the **Nosema bacteria** that caused the death of bees.

Merops bird is one of the most threatening enemies to all types of bees.

They are among the most hated migratory birds by beekeepers, as they feed on these beneficial insects by attacking the apiaries and hunting bees while they are flying in the air.

One bird devours about 70 bees per day! these birds appear in the apiaries in Ghris during spring.

Nosema is a disease that affects bees and often leads to death, because bees with this disease have difficulty digesting food, and When queen bees become infected they also have reduced lifespans and cease to lay eggs. These impacts cause reduced colony health, population, and performance, which can ultimately result in the colony dying.

1

2

Moving to Younes's apiary

To find out more about this phenomenon, I moved to the Younes apiary, which is located in " Ksar Ait-Si Mhmed Oulhsen " Goulmima, to ask Younes if he was also affected by the disappearance of bees in 2021.



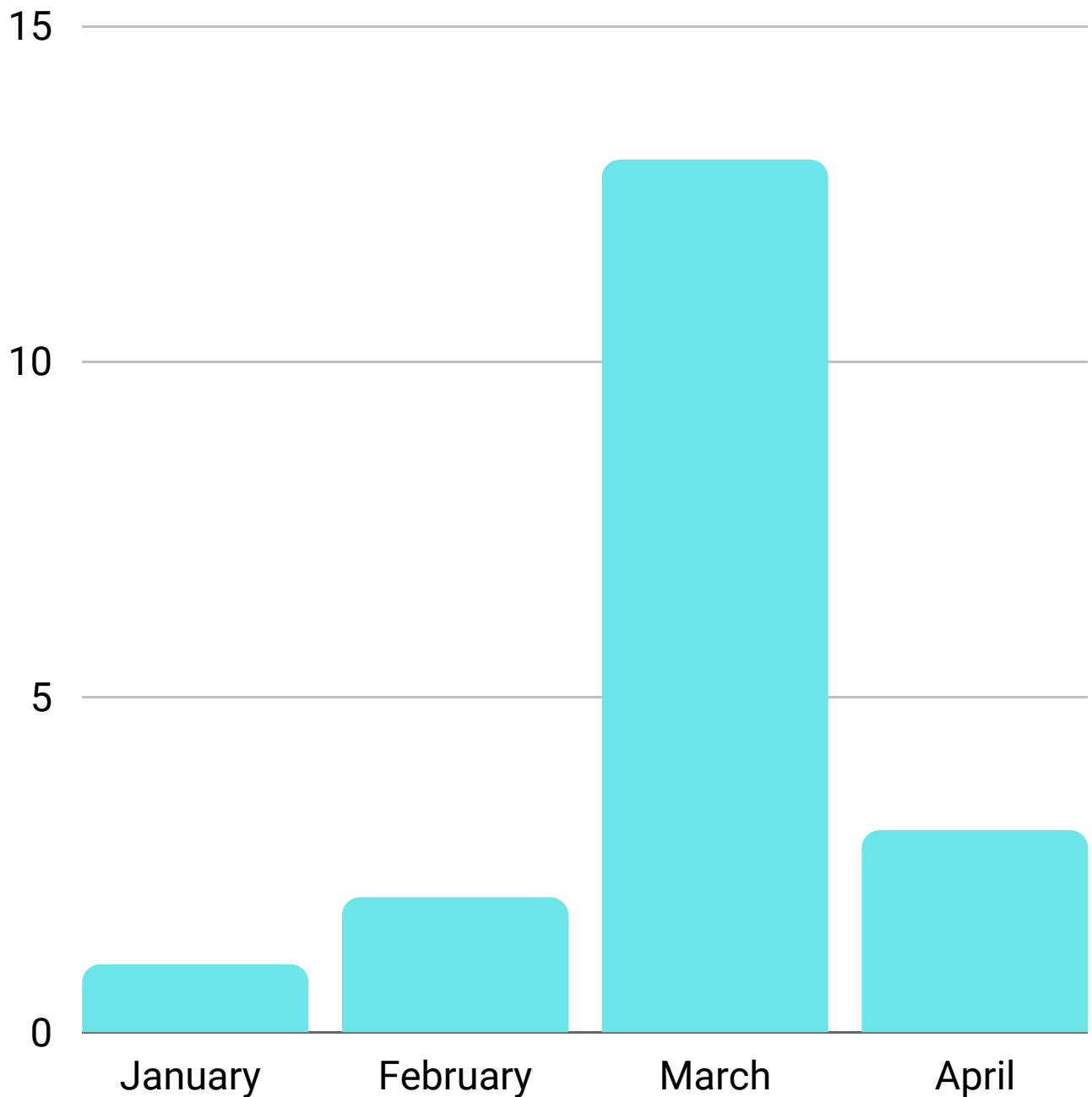
A picture From Younes's apiary in Ksar Ait-Si Mhmed Oulhsen

Younes mentioned that he is among those affected by the phenomenon of the disappearance of bees in Goulmima as he lost more than 21 beehives this year. This led to a significant decrease in honey production, He said that he mainly depends on selling honey as a mainstay for livelihood.

When I asked him about the reasons of the disappearance of bees, he said that it was due to drought and global warming.

He continued: " Because of the scarcity of pasture, the queen bee gives its order to start killing males to reduce their reproduction and that causes bees to disappear every year"

Statistics from Younes's apiary



**A STATISTICAL REPRESENTATION OF THE NUMBER OF HIVES THAT
DISAPPEARED FROM JANUARY TO APRIL 2021**

Some solutions & Advice for the beekeepers to face the disappearance of bees

Abdessalam Balouk urges beekeepers to stick to these tips in order to avoid the disappearance of bees, he says "If a colony dies of unknown causes, the hive should be closed pending diagnostic. the remaining hive must be protected from thief bees".

He adds: "The hives should be spaced apart. The beekeeper should try to arrange the hives so that it is easy for the bees in the apiary to find their way into the colony. This will help reduce breakouts of bees."

As for Youness Sadki, he stresses on " Fighting off predators that prey on bees as (Merops birds, ants, frogs, snakes, and spiders...).

He emphasizes "The beekeeper should not transfer infected honeycombs from one hive to another, or from apiary to apiary." honeycombs must be exchanged very carefully.

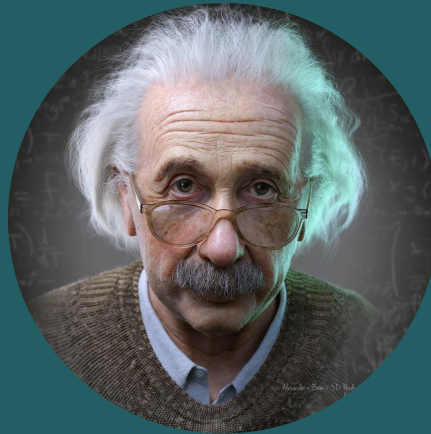
One more tip I come up with during this report is that the number of times the cells are opened should be reduced as much as possible, provided that the cells are examined on warm days and during sunny hours, and in times of little wind, and the examination should be quick as we feel satisfied with the presence of the queen and the sufficiency of food inside the cell.

One last tip is that the beekeeper should place Heavy stones on the top of the honeycomb cover from the outside in very windy times, especially on the honeycomb that are located in open places and more susceptible to the effects of the wind.

EL-KHAWARIZMI
HIGH SCHOOL

PRESENTED BY:
KICH YASSINE

APRIL/2022



**“IF THE BEE DISAPPEARS FROM
THE SURFACE OF THE EARTH,
MAN WOULD HAVE NO MORE THAN
FOUR YEARS LEFT TO LIVE.”**

"Albert Einstein"

Attendants

Younes Sadki

*A beekeeper in
Ait-Si Mohamed
Oulhsen
Goulmima city*

**Abd al-Salam
Balouk**

*A beekeeper in
Goulmima city
and a collective actor
since 2016*

**Abdelaaziz
EL yamani**

*English Teacher in
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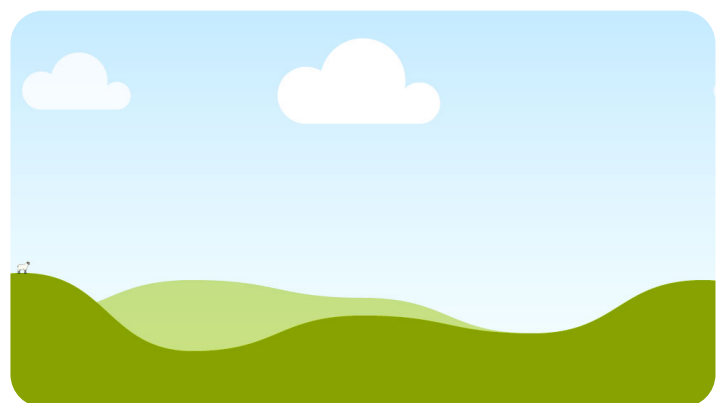
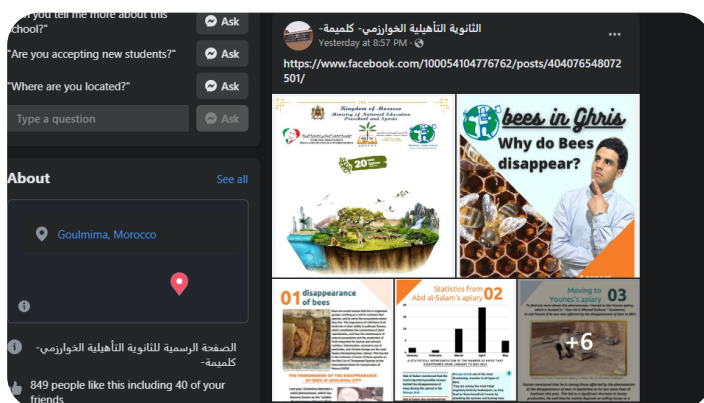
WHERE THIS REPORT WAS PUBLISHED

Wall Magazine



"El-Khawarizmi High School"
Page On Facebook

الموقع الإخباري الجهوي جديد أنفو



<https://www.facebook.com/100054104776762/posts/404076548072501/>

<https://www.jadidinfo.com>

Sources (13/03/2022)

1. <https://www.birdid.no/bird/eBook.php?specieID=1060>
2. <https://beeaware.org.au/archive-pest/nosema>

Special Thanks To

Mr. Abdelaaziz EL yamani

English Teacher in El-khwarizmi high school - Goulmima

Mr. Abd al-Salam Balouk

A beekeeper in Goulmima city and a collective actor

Mr. Younes Sadki

A beekeeper and honey seller in Goulmima

Mr. Mohamed Hana

Director of El-khwarizmi High School - Goulmima

**And all members of the
administration of
El-Khwarizmi High School,
Goulmima**

