

BEES! OUR ENEMIES OR FRIENDS?

Hi Friends

Today we will be talking about bees, I am sure some of you are already thinking about the unpleasant encounters that you had with bees. I hope you don't only see the bad in the bees but also the good part that they play in nature.

What are Bees?

Bees are classified as insects. You will be surprised to learn that there are more than 20 000 different species of bees around the world, with 2755 bee species in the Sub-Saharan Africa and 1 000 species occurring in South Africa. What is interesting about the bees is that not all can sting and also not all can make honey.

Though the African Killer bee has been one of the most feared because of its tendency to swarm and attack, especially when disturbed in the hive. Most often we never can tell them apart hence some of us get so excited when we see them because we think they will sting us.

Friends, I think this makes our bee topic so important so that we can start looking at bees with a different eye. The question remains: Are they our enemies or our friends?



Credit: Photo by Nicole Pearce on Unsplash

What is the Role of Bees in Nature?

Bees are important for pollination and as a result they play an important part in advancing the biodiversity of most plant species. Pollination is a process that is needed for plants to reproduce. Bees get their food source, nectar, from flowers. As nectar is collected the pollen gets stuck on the bees' hairs and as they go to other plants of the same species then it is transferred to the female plant. This process is very important for the flowers. Birds, butterflies and moths also make this process possible.



Credit: freepik.com

Food Sources Pollinated by Bees

Bees play an important pollination service by pollinating most of the plants that provide food to humans. This includes vegetables, fruit, seed crops and legumes. If bees are impacted then the variety of food will be impacted. It is estimated that almost 75% of the world's food and grain crops depend on pollinators for the production of quality crops. Also remember the delicious honey humans harvest from the bee hives. Proper pollination is important for the visual quality of the fruits.

Busy Bees

Often we see bees being very busy and we always wonder what are they busy with. Bees are always on duty, they are known to visit almost 100 flowers with just one flight. They usually would do almost 40 flights per day. This means many flowers are pollinated in a day. Bees share information with each other, especially when a good source of food has been discovered. They will do a dance which shows others where the source is. This works well for the plants because more of their species will be pollinated in the same area.

Threats to Bees

The spraying of insecticides on crops is one of the most destructive activities for bees. The impact of insecticides on bees results in impaired memory and loss of a sense of direction and the worst is when it results in high death rates and species decline. Diseases and pests also play a role in the dropping numbers of bees because they also attack bees and feed on their fluid. This can lead to the collapse of bee colonies. This largely happens when the bacterial diseases are spread through the hive and impacts the amount of worker bees and only the nurses and the queen remain. It is not easy for them to maintain the colony. Urbanisation also impacts the habitat and food sources of bees. Humans destroy plants for the building of their houses and other urban structures. Pollution which is one of the results of urbanisation also affects the scents that flowers produce to attract the bees and this results in poor pollination of flowers and food sources decline.



Carpenter Bee

Credit: www.whatsthatbug.com

JOZI BEE HOTEL PROJECT

A collaborative citizen science project between Wits University and Tutus Loco Bee Hotels where bee hotels are setup in Johannesburg. For more information, and to signup, please check out www.jozibeehotelproject.com/

I am sure by now you know that bees are your friends. Let us start looking after the different bee species as they play an important role in making sure that flowers are pollinated and that a large of variety of food is available for all life on Earth. Respect bees!

Love
The Water Wise
Education Team



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References for Newsletter:

- www.arc.agric.za
- www.turtlesa.com
- www.bee-careful.com
- www.sanbi.org
- www.agriorbit.com

BEE ACTIVITY

Have fun playing this word search. Find the words in the word search and circle them. Scratch out the words on the right hand side each time you find a word. This will help you keep track of the words you have found. Let's see how many words you can find!

Bee Word search

U	F	R	I	E	N	D	S	A	S	L	P	D	Y
P	O	L	L	I	N	A	T	I	O	N	S	T	S
O	L	E	C	D	N	H	N	R	D	E	I	N	R
S	P	A	R	H	P	R	O	B	D	S	E	Y	E
O	F	I	O	O	E	R	E	I	R	L	L	T	W
I	O	B	P	N	A	W	C	E	L	F	L	D	O
E	O	I	S	E	R	I	V	O	R	N	T	A	L
E	D	R	I	Y	T	I	P	E	T	E	A	P	F
E	D	D	T	C	D	U	T	T	I	C	T	O	P
I	R	S	E	A	T	T	R	A	C	T	S	L	B
B	E	S	S	I	U	D	A	C	I	A	E	H	M
I	N	E	W	B	O	O	T	S	T	R	M	A	O
I	E	T	P	O	L	L	U	T	I	O	N	I	T
B	F	P	R	O	D	U	C	T	I	O	N	R	H

- FOOD
- ATTRACT
- HONEY
- FRIENDS
- HAIR
- POLLINATION
- NECTAR
- INSECTICIDES
- POLLUTION
- MOTH
- BUTTERFLY
- PRODUCTION
- BIRDS
- DIVERSITY
- FLOWERS
- CROPS
- BEEES
- POLLEN

Play this puzzle online at : <https://thewordsearch.com/puzzle/2227864/>

ANSWERS

H	R	N	O	I	I	C	O	O	P	R	D	U	C	T	I	O	N	R	H
I	E	T	P	O	L	L	U	T	I	O	N	I	T						
O	A	V	A	M	B	O	O	T	S	T	R	M	A	O					
M	H	E	A	I	S	I	U	D	A	C	I	A	E	H	M				
B	L	S	E	A	T	T	R	A	C	T	S	L	B						
P	O	F	I	O	O	E	R	E	I	R	L	L	T	W					
F	P	A	R	H	P	R	O	B	D	S	E	Y	E						
L	A	V	A	M	B	O	O	T	S	T	R	M	A	O					
O	D	O	I	S	E	R	I	V	O	R	N	T	A	L					
O	D	O	I	S	E	R	I	V	O	R	N	T	A	L					
M	L	T	I	R	E	R	I	V	O	R	N	T	A	L					
E	Y	E	S	E	R	I	V	O	R	N	T	A	L						
R	I	N	R	D	E	I	N	R	D	E	I	N	R						
S	T	S	I	U	D	A	C	I	A	E	H	M							
Y	D	P	R	O	D	U	C	T	I	O	N	R	H						



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YOUR FEEDBACK

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<https://forms.gle/ePtXdPBUjTz4Um5H7>

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