

GLOBE

OMAN



Saud bin Azzan Al Busaidi Primary School (5-10)



The effect of the cutting of trees and gulls on decreasing the number of fungal organisms and raising the temperature

Preparing students

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SAOUD BIN AZZAN AL-BUSADI SCHOOL (5-10)

The Teacher Supervision

Said Nasser Said AL-Senidi

February 2018/2019

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Summary:

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The aim of our research is to study the effect of the cutting of Ghaf and Sumer trees and their threat to wildlife in the environment and its associated

Of high temperature. It was noticed that these trees were cut by citizens to feed livestock

This may be unconscious and aware of what they are doing, as well as through the distribution of residential plots in the environment in which these trees are abundant, which is a shelter for these fungal creatures. The following question was asked: What is the effect of cutting the Sumer and Ghaf trees on decreasing the number of fungal organisms and raising the temperature? In this research, we adopted the method of practical experimentation to detect this effect. We applied the LAND COVER, , And the atmosphere protocol by measuring surface temperature. We found that the areas with abundant vegetation have a low temperature compared with the areas where the trees were cut, which in turn contributes to creating a suitable environment for the organisms that T Based on these findings, we have made the following recommendations: Raising citizens' awareness in a significant manner and staying through the cooperation of governmental institutions in the danger of carrying out these practices and the consequent damage to the natural environment and society. The establishment of nature reserves for Al Ghaf and Sumer trees in the Sultanate of Oman. The inclusion of scientific material in the curricula talking about wildlife and .the importance of these trees and the rich environment they provide

research question :

What is the effect of the cutting of trees and gulls on fungal organisms?

Hypothesis:

The cutting of trees and gulls leads to the decrease of fungal organisms.

Introducti

God loves the planet Earth with a beautiful green patch represented in plants, it is the lung of the earth. From which the living organisms breathe and are their natural habitat. The importance of plants is a renewable resource if we provide the appropriate environmental conditions. However, there are some practices that may harm the planet and threaten the organisms in it. About 10,000 years ago, the total area of forest land in the world was about 15 billion feddans, during which man managed to destroy the total of 4 billion feddans through the cutting and sometimes continuous fire, which is free of lightning spark or human tampering with fire! We do not exaggerate if we say that our human life and animal life is impossible without the presence of vegetation. Plants appeared on the surface of the .earth long before the ages to prepare for the life of any animal

Our beloved country Oman has been blessed with a natural environment rich in wild plants such as Sumer, Ghaff and various wild animals. However, some of the practices that have negatively impacted our environment, cutting off the Ghaf and Sumer trees, are threatening the environment, .threatening the extinction of species and increasing the temperature

The purpose of our research is to study the effect of the cutting of Ghaf and Sumer trees and their threat to wildlife in the environment and the accompanying temperature rise. The state of Jalan Bani Buhsan in Sharkia Governorate, which is one of the most abundant areas of Ghaf and Alsumar, .Previously, the course led us to do this research

research method:

1. Use the atmospheric protocol to determine the surface temperature using the Pyrometer and the ground cover protocol to measure the density of the trees

2. Interviews

3. Collect information from books and the web.

Search procedures :

1. Identify and study specific sites

2. Interviews with those concerned with research

3. Schedule a program plan

4. Distribution of roles

5. Search for books that serve research from sources of learning and collect information from them

6. Application of the protocols serving the research vegetation cover protocol to measure the density of trees and the atmosphere protocol to measure the temperature of the surface

7. Adoption of the research

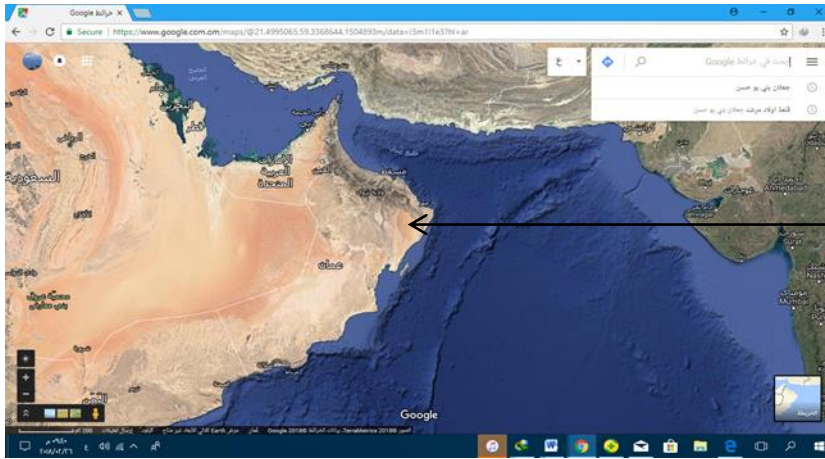
Implementation schedule for the research plan

date of starting	the mission	student's name
December 2017	Collect information on the subject from sources	Supervisor Rashed Al Rajhi
January - February 2018	Study sites	Hamad Rashid Al - Masrouri
28 January 2018	See the diverse resources that serve the search	Supervisor Rashed Al Rajhi
February 2018	Conduct interviews	Hamad Rashid Al - Masrouri
February 2018	Interpret information, answer questions and draw conclusions.	Hamad Rashid Al - Masrouri
February 2018	Writing research and auditing	Hamad Rashid Al - Masrouri

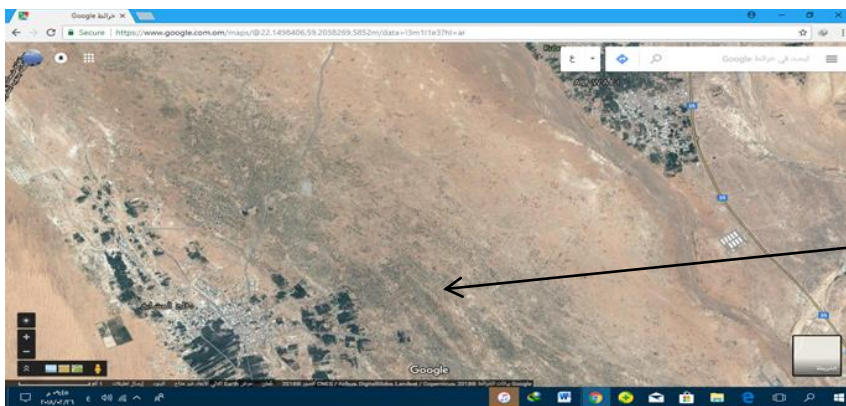
Study site:

The location of the study: Sultanate of Oman, Al-Sharqia Governorate, Jalan Bani Buhsan Governorate, Al-Lawiya 1 and Al-Luwiya 2, Falaj Al-Mashaykh,

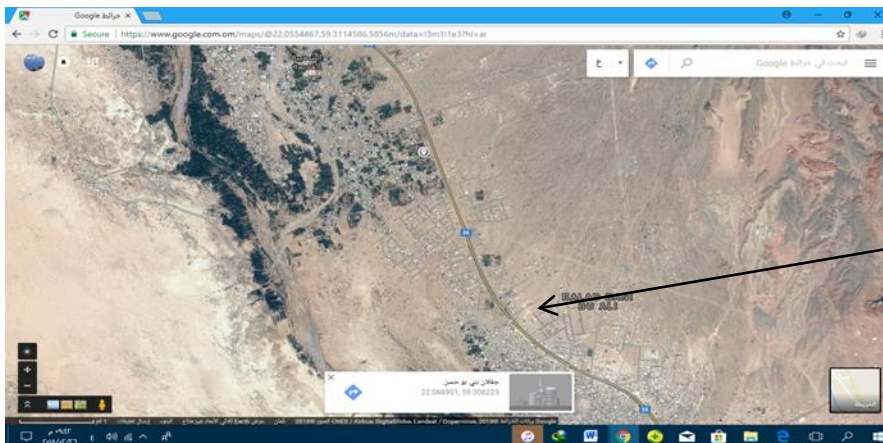
Al-Sail Reserve, February, the atmosphere is moderate



Jalan Bani Buhsen



Falaj ALmashek



LAOEAH

1. Collect information from books and the web

In which information was collected in three stages:

1.a definition of Gaf and Alsmer and importance and how it is the home of our living organisms

2.the impact of logging and environmental imbalances

3.Efforts to limit such practices in the State



Al-Ghaf (Prosopis)

The Al Ghaf tree is one of the most drought-tolerant and drought-tolerant wild trees, growing in the UAE with the trees of Al-Harat, Al-Neem and Sidr

It is highly saline, does not consume too much water, and is resistant to weather and wind fluctuations. It is suitable for cultivation in sandy saline soil. Its roots are deep in the soil for long distances and may reach 12 meters high

The trees, which are called Al Ghaf and scientifically, grow in the south-eastern corner of the Arabian Peninsula, in both the Sultanate of Oman and the UAE

Many birds build their nests in the trees of the Ghaf. Including the desert oyster owl, the brown neck, the long neck and the long-standing falcon. Other species are nested in the cavities of logs and branches. Many birds turn to these trees to eat. The larvae of the beetles and butterflies are evaluated. A fetus (Sam leprosy) enters cracks in her rough cheek to rest during the day, and puts an egg in it. The bees reap the nectar of their flowers to produce high quality honey. The juice is extracted from the stem and the larvae extract food from the roots

Trees and shrubs of Ghaf trees take up stumps that grow on them

Al Sammar Tree

Engineer Fatima Al-Hantubi said

(The tree of the lush of the low desert trees with a wonderful umbrella with branches of equal size stems from one point on the surface of the soil and grow outward

symmetrically in all directions, at a angle of 30 degrees, to give the shape of cone inverted and natural shade of this tree, and this type of trees grows in places Where water is available at deep depths, with long roots reaching the aquifers, and depends on the length of the tree on the amount of water obtained, the rate is limited to the height of this tree between five meters and has a prominent role in the ecosystem in the environment, Of green areas and simple needs Of water)

Impact of logging and environmental imbalances

Deforestation in the environment results in a decrease in the number of trees, which means that the forest area, which supplies the Earth with large amounts of oxygen and removes carbon, is shrinking. It also results from the logging of the inability of some animals to find shelter and food. Where it is clear to us through the above information the importance of the Gaff and Sumer trees in contributing to the production of oxygen gas and the disposal of carbon dioxide and it is home to several organisms

Efforts to curb these practices in the state

The conservation of biodiversity in the Sultanate of Oman is essential, as ecosystems are sensitive, fragile and renewable natural resources are scarce, and Oman's ecosystems face challenges of many interrelated factors such as overgrazing and logging. The need to protect the environment and preserve biological diversity As a result, the Sultanate signed the Convention on Biological Diversity in June 1992 during the World Earth Summit in Rio de Janeiro, Brazil, .and ratified the Convention in 1994

Under the Royal Decree No. (119/94) and then issued the National Strategy and (Plan of Action for Biodiversity in the year 2000

ESHAR is an initiative of the Ministry of Environment and Climate Affairs for - the conservation of wild plants because of its great economic and cultural importance, as it provides food and medicine, fuel as well as its role in maintaining the balance of ecosystems and supporting the life of many organisms through the cultivation of trees and plants The various Omani wild

:Interview with citizens - 2 •

Some people who cut trees were interviewed and asked the •
:following questions

¿What is your reason for cutting the Ghaf tree - 1 •

• • The answer measures livestock feed .

• • What is the reason for your cutting of the trees - 2

• • The answer was to evaluate nature and nature .

• • Is the work done by him correct? And why .3

• • We want to answer two parts :

• • (A) Some of them (if they are

• • Section II)! He justified his action that he did not think)
• • absolutely, but something simple

• • In your opinion, does this damage the trees .4

• • The answer was yes if the cutting was significant

• • Do you think these practices on fungal organisms

• • The answer was yes because many organisms are meant as
• • shelter for them



Interview with specialists in the reserve of the Galilee in the state of - 3
:the full and Alwafi



The interview was conducted to identify the importance of trees and how they are considered to be a natural habitat of living organisms •

Names of interviewers •

Mohammed bin Ali bin Saeed Al Balushi Specialist Reserves • •

Ali bin Rashid Al-Sunaidi Agricultural Technician • •

Ahmed Al-Mamari, supervisor of protected areas • •

1. When was the reserve established? What is the purpose • •

(Under the Royal Decree (50/97 1997/6/28 • •

2. What kind of trees are there • •

* The trees of the thorns in the first place and then the trees of the Ghaf in a simple proportion • •

3. Are these trees a habitat for living beings • •

Yes and significantly, where the number of living organisms in the reserve 1200 types, according to statistics of the Office of Environmental Conservation of the Royal Court • •

It also provides the appropriate temperature for some shrubs of more than 100 species • •

The tree that dies is not removed because some living organisms are mechanic and when rain falls, new trees grow in their place • •

There are irregularities in the threat of living organisms, through the cutting of these trees, whether by citizens or through the distribution of land in those areas where these trees

As for the violators, what has been confiscated •

.And a fine of up to RO 1,000 and booking the vehicle

As regards the distribution of land, there is permanent contact between the two sides, and it is not distributed until after reference to the Ministry of Environment and Climate Affairs and take their views •

What is the role of the reserve in reducing the decline of these trees - 2

:The Trees Initiative was launched which aims to •

Educating and educating the community and activating its participation in the conservation of wild plants. Maintain local wild plants and increase the green area. Where the number of trees planted about 12,000 seedlings

The establishment of what is known as the preservation of the environment, which is like a protected area, but the control is few •

In the future plans to create a part of the reserve for tourists to develop the reserve to raise awareness of the importance of the reserve and how it contributes to the preservation of wildlife •

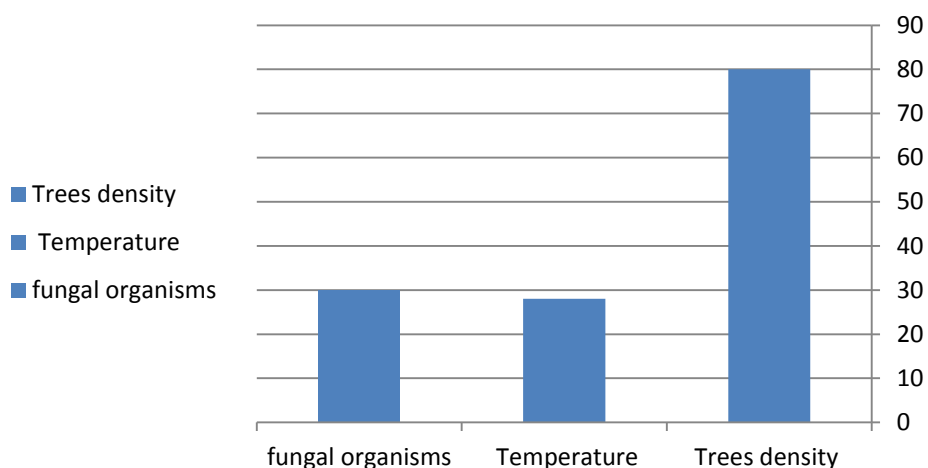
Study site



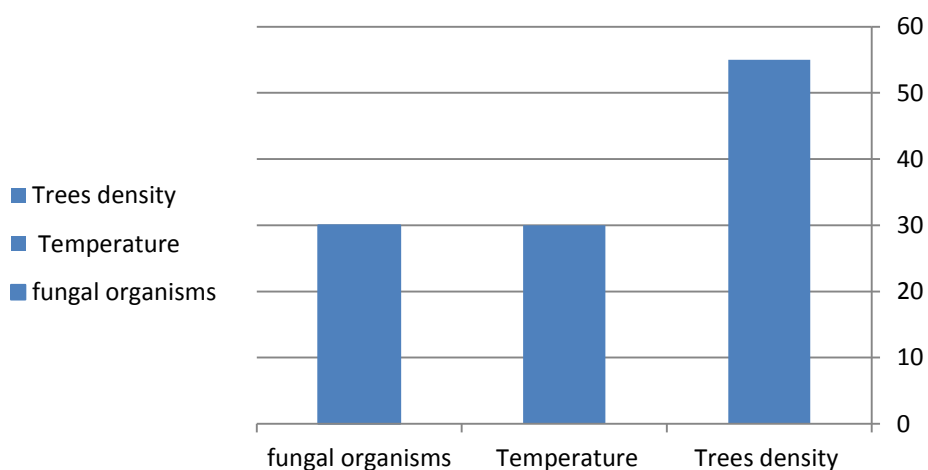


fungals organisms	Temperature	Trees density	e Location	Time	History
No	44 C	%5	The lobe 2	10:30 am	13 2 / 2018
There are birds and some wild animals	38 C	%55	The sheikhs FALAJ	10:30 am	14 / 2 / 2018
The number of living organisms is estimated at 1,200	31 C	----	Al-Salil Reserve	10:30 am	20 / 2 / 2018

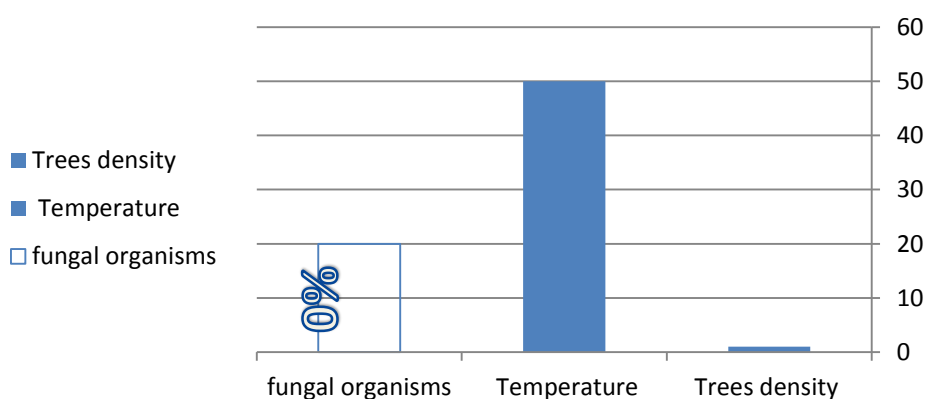
Al-Salil Reserve



The sheikhs of the sheikhs 1



The lobe 2



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THE GLOBE PROGRAM

إدخال البيانات العلوم

سعيد السعيد

درجة الحرارة السطح / Saud bin azzan basic school / falaj almoushi / الصفحة الرئيسية / إدخال البيانات

Local

06:30

2018-02-14

الوقت العالمي محوّل إلى وقت المحلي يكون 10:30 14-02-2018

التغير الزمني: UTC 8:17

السطح أو المحرّول المتغيرة

Surface Temperature

موقع العينة لتوقع

درجة الحرارة

عينة 1

عينة 2

عينة 3

موقع

درجة حرارة السطح

38

موقع

درجة حرارة السطح

36

موقع

درجة حرارة السطح

32

data analysis:

:Through the data collected we find that

***The survival of fungal organisms depends on the presence of .vegetation because they serve as shelter for them**

***.Random and unplanned logging leads to diminished vegetation**

***The lower the density of trees, the higher the temperature and the .subsequent migration and death of fungal organisms**

Results

- 1.The higher the density of trees, the lower the temperature and the higher the chances of the presence of fungal organisms**
- 2.The presence of Ghaf and Sumer trees provides a fertile environment for fungal organisms of all kinds**

Recommendations

- 1.Establish natural reserves in all states as compensation for trees that have been cut and removed**
- 2.Increase the awareness of citizens about the importance of these trees and how they play an important role in preserving wildlife and tempering the atmosphere**
- 3.Emphasis and non-leniency in dealing with those who do wrong and harmful to these trees**
- 4.Include in the curriculum modules dealing with the importance of wildlife and how to preserve it**
- 5.To oblige governmental and private institutions that remove trees in order to benefit from the site, by planting other trees to compensate for them**

Conclusion

It is confirmed by the data we have obtained that the denser the trees have contributed to the creation of a more dynamic environment for organisms. It also contributes to the reduction of temperature and diversity of fungal organisms, where the number of fungal organisms in the reserve of the seed in the state of full and .1200 miles. This is because the density of trees is very high

Note that our search was limited to the reserve of the descendant only because of the lack of time and after the other reserves such as the reserve of Jeddah Harrasis, which includes trees Alghaf and .Samar

Also, we did not measure the density of trees in the reserve of the slope, because the proportion of vegetation is large through the .observation

We have also been unable to communicate with people who have set up private reserves such as the Gaf Reserve in the United Arab .Emirates, established by Ghanem Ben Yairuf

If we have time in the coming days, we will apply the density of the trees to the soil and soil protection, which contributes to the knowledge of the appropriate soil for the Gaff and Sumer trees and to conduct a wider interview

With specialists in the field of the Omani environment, and access to research and studies conducted in the field of our research

Acknowledgments

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**And facilitate communication with the competent authorities
concerned with research, and we thank both the Ministry of
Environment and Climate Affairs**

**Represented in the Al-Sallayil Nature Reserve in the Wilayat of Al-
.Kamil and Al Wafi and the Municipality of Jalan Bani Buhsan**

**We do not forget to thank Mr. Saeed Al-Sunaidi, the program's .
supervisor, for his moral and material support and for his contacts
.to serve the research**

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