

X - PLORING SCIENCE

ECOLOGY WEBQUEST

ECOSYSTEM RESEARCH PROJECT

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~ INTRODUCTION ~

The World Ecological Preservation Authority (WEPA) has asked for your assistance. They require you to inform the population about the different ecosystems of the planet. Many people are moving to or visiting these areas and are not taking the precautions they should while there. Thus, conditions are changing for the animals and plants that live there and some are not able to adjust.

The ecosystems that most are visiting are

- ★ THE RAIN FORESTS
- ★ THE TUNDRA
- ★ THE NORTH / SOUTH POLES
- ★ GRASSLANDS
- ★ CONIFEROUS FORESTS
- ★ DECIDUOUS FORESTS
- ★ DESERTS

[Click here to view your task.](#)

~ TASK ~

WEPA want you to research one of the ecosystems named overleaf and produce a newsletter to be included in the **Irish Voice**, a national newspaper. The newsletter must be four pages long and contain information that is accurate, informative, graphical and interesting. The work must be yours, and not simply copied and pasted from different websites or books. **Copying such information is called plagiarism and is against the law.** The newsletter can be produced using Microsoft Publisher®.



Your newsletter must include but is not limited to:

1. A map showing where on the planet the ecosystem is found.
2. What the following terms mean in relation to ecology: **habitat, ecosystem, biome, biosphere, abiotic factors, biotic factors and food chains & webs.**
3. Information about the climate / weather conditions of the ecosystem and how it affects the animals and plants that live there (use **graphs or charts** outlining sunshine, rainfall, wind speed etc.)
4. Accurate information about 4 plants that live there (include pictures)
5. Accurate information about 4 animals that live there (include pictures)
6. 10 interesting facts about the ecosystem.
7. A food chain containing 5 steps.
8. A food web of the ecosystem.
9. The environmental threats against the ecosystem.
10. A list of the resources used during your research.
11. An article from the editor entitled "The importance of the ecosystem and how it can be preserved". **This will be your opinion of the importance of the selected ecosystem but based on the information you have required during your research.**

[Click here to see how you should carry out your task](#)

~ PROCESS ~

1. Form a group of 3 or 4 students and pick which ecosystem you are going to study. Your teacher may pick one for you.
2. You have 5 class periods to finish the project.
3. Fill out [Research Summary Page](#) as you search the web- this will include brief information about your finding and all the Internet links you have found based on the research.
4. You should not limit the information on your newsletter to what is required. You could also include information on the following to name but a few:
 - ★ What to wear there
 - ★ Activities to do
 - ★ Dangers and possible threats
 - ★ Habitats
 - ★ Industry
 - ★ Local food for humans
 - ★ Pollution
 - ★ Environmental concerns
 - ★ Etc
4. Don't limit yourself just to the web. Look at encyclopaedias, magazines, newspaper articles and books.
5. For the article give your opinions based on what you have found out about the ecosystem and the environmental threats.
6. Produce the newsletter on Microsoft Publisher® or Microsoft Word®, making it as visual as possible. Use your imagination!!



[Click here for resources and web links](#)

~ RESOURCES ~

The following is a list of useful websites to visit to gather your information for your task.

DO NOT LIMIT YOURSELF TO THE WEB ONLY

General Search Tools:

[Encarta](#)

[Google](#)

[Alta Vista](#)

[Worldbook](#)

Ecology Websites

[Cyberzoo](#)

[Living Things Habitats](#)

[Biomes](#)

[Major Biomes of the World](#)

[Mission Biomes](#)

[Earth Floor](#)

[World Builders - Introduction to Biomes](#)

[Aquatic Ecosystems](#)

[EPA](#)

[Endangered Ecosystems](#)

[Blue Planet Biomes](#)

[Enchanted Learning Biomes](#)

[MBGnet Biomes of the World](#)

[The World's Biomes](#)

[Yahoo Directory for Ecology](#)

~ EVALUATION ~

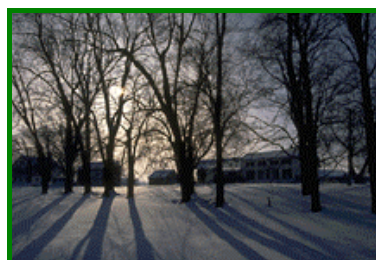
Your newsletter will be assessed under the following guidelines.

CRITERIA	MARKS
Definitions	5
Climate Conditions	10
Plants	10
Animals	10
Interesting Facts	10
Food Chain	5
Biotic factors	5
Abiotic Factors	5
Environmental Threats	10
Presentation	10
Originality	10
Team Effort	10
Total Marks	100

[Click here for Conclusions](#)

~ CONCLUSION ~

To conclude, I hope you have enjoyed researching and putting together your newsletter. Don't forget what you have learnt, as all this can be used for your ecology project for your Leaving Certificate in Biology. Think about how you felt about preserving your ecosystem and think about how you can relate that to your own environment.

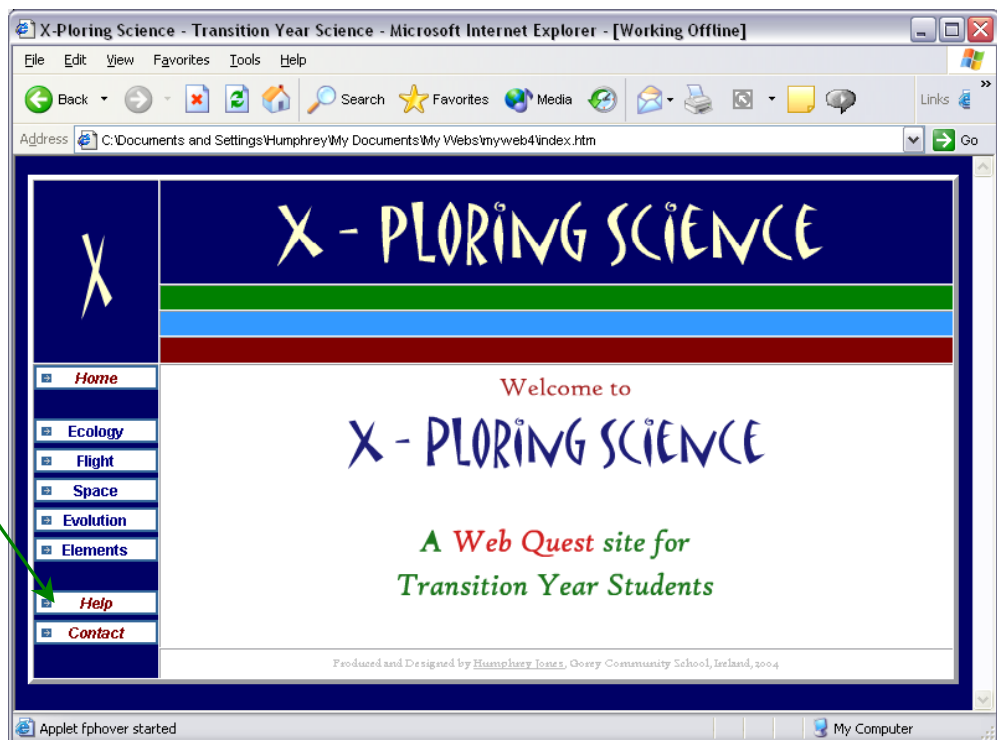


~ TEACHER GUIDELINES ~

The Ecology Webquest is a great way for TY students to discover for themselves the basic elements of ecology. It promotes higher order thinking and learning, encourages teamwork and tries to use a variety of different skills to produce a concrete product that the students can use for their TY portfolio. The teacher's input into the Webquest is minimal, but some preparation can aid in the enjoyment and smooth running of the Webquest.

1. Print out the [Research Summary Page](#) for each student.
2. Give some input into the use of Microsoft Publisher®
3. Emphasis the assessment procedures and stress the importance of originality and teamwork.
4. Place a time line on the project. 5 class periods is the recommended allocated time.

● For More information visit the [Help](#) section in the main site.



ECOLOGY WEBQUEST

ECOSYSTEM RESEARCH PROJECT

RESEARCH SUMMARY PAGE

Name of Ecosystem	
Definitions:	Ecosystem Habitat Biome Biosphere Abiotic Factors Biotic Factors Food Chain Food Web
Climate Conditions	
Plants	
Animals	
Interesting Facts	
Food Chain	
Biotic factors	
Abiotic Factors	
Environmental Threats	