



Let's save the biodiversity of the Mediterranean area!

Develop a campaign on the impacts of climate change on Biodiversity in the Mediterranean area

Type of pedagogical project, activity, action, accompanying	Pedagogical project
Key words of relevant disciplines/ Pedagogical content	Biodiversity, Mediterranean ecosystem, impact, habitat
Problematic	Inform our mates and the public on Climate change and its impacts on the Mediterranean species
Thematic	
Disciplines (sciences, geography)	Geography: climate in the Mediterranean region, climate change Natural science, Biology: species and biodiversity, impact of climate change Possible cooperation of language teachers and Arts/Computer teachers
Pedagogical Objectives/New targeted skills	 The students will be able to: Work in Teams (organization of teamwork, distribution of roles/tasks, follow the rules of teamwork, timetable, interaction) Understand the importance of Biodiversity and the impacts of climate change on Biodiversity in the Mediterranean region Understand causes and effects Develop capacity to present knowledge and ideas to others, in a synthetic and clear way, in different forms (digital, posters) Find, evaluate and process information from various sources (internet, books, etc.)
Public target(s) (age, requested skills)	11-14 years old students























Description (step by step)

Step 1: Introducing students to the issue (brainstorming, video, press articles, etc.) See: Activity "Biodiversity in Danger!"

Step 2: Creating the teams and planning teamwork

Groups of 4-5 students are organised and work is scheduled together with the teacher (timetable, objectives, distribution of roles/tasks, etc.)

Step 3: Becoming "ambassador" of some endangered species

Each group decides which of the Mediterranean endangered species by climate change it will work on. A list of species is provided by the teacher.

See examples in the short report of WWF on

http://d2ouvy59p0dg6k.cloudfront.net/downloads/FOCUS Mediterranean 14 032018.pdf

FR: https://www.wwf.fr/sites/default/files/doc-2017-

<u>07/151110 rapport les impacts du changement climatique sur les espece s.pdf</u>

GR: Poster : http://www.wwf.gr/images/pdfs/pe/RedBookPoster.pdf https://www.wwf.gr/endangered-species Παίξτε μαζί μας: Ένα κουίζ για την βιοποικιλότητα της Ελλάδας, βασισμένο στο Κόκκινο Βιβλίο των Απειλούμενων Ειδών

Step 4: Researching phase

For each of the selected species, the group of students must answer the following questions, through research on the internet, material provided by the teacher, a visit in a Natural History museum, or other:

- What is the role of this species? Identify the relationships between the species and other elements of the ecosystem.
- What are the threats? Identify the main causes of biodiversity loss (habitat destruction, over-exploitation, introductions of invasive alien species, and other pressures).
- What is the role played by Climate change? Explain how does Climate change have impacts on the species & impacts on its























	habitat.
	The objective of the research is to find or prepare visual information for the exhibition (posters or digital). Students will be informed of the issue of copyright for images, videos, texts, etc. Each team should prepare acknowledgments, bibliography and resource webpages to me mentioned in the exhibition.
	Step 5: Communicating on our findings! Preparation of an exhibition of the posters in the School or/and of a PowerPoint to be added to the blog of the School or/and the production of an article in the School newspaper.
	With the support of the teacher, helping for the selection and organization of the information collected, each group produces a simple and clear poster focusing on:
	Climate change: a threat for Mediterranean species?
	Students may prepare the posters (exhibition) and/or the several slides (PowerPoint) with the support of the Art teacher (Poster) or Computer (ppt) to inform other students of the School about the students' findings.
	The presentation should showcase the main following aspects: - Mediterranean biodiversity losses/risks of losses - The role of Climate change
	- The indirect possible impacts for human
Place (meeting room, outside space,)	 Classroom, IT room Exhibition Hall Possible research at home, in a library, etc
Individual and / or collective actions	Teamwork with the support of the teacher
Material needed	Access to internet and computers Material to make the posters (potentially)























Duration of pedagogical project or activity	6-7 hours
Evaluation of the new acquired skills	Teachers may evaluate the posters and the Power Point through several criteria defined beforehand. E.g. scientific validation of the content, attractiveness and clarity of the presentation (with various supports like images, graphic tables, texts, etc.) A Questionnaire (satisfaction & comprehension) can be proposed to the
	visitors of the exhibition (or the blog).
Eco-citizen adaptation, knowledge enhancement and links to other topics	Let's change our habits This Project can be extended by eco-citizen actions for example: clean the nature, pick up rubbish from environment (rivers). There are a lot of interesting videos and documents on this topic: French • https://reporterre.net/Le-changement-climatique-aura-des-effets-desastreux-sur-la-biodiversite • https://www.consoglobe.com/la-mediterranee-menacee-par-le-rechauffement-climatique-cg Greek: • http://kpe-kastor.kas.sch.gr/biodiversity_site/b/climatic_change.htm (pedagogical material on CC and biodiversity) • Poster species endangered: http://www.wwf.gr/images/pdfs/pe/RedBookPoster.pdf και Παίξτε μαζί μας: Ένα κουίζ για την βιοποικιλότητα της Ελλάδας, βασισμένο στο Κόκκινο Βιβλίο των Απειλούμενων Ειδών
	Italian: • Introduction to biodiversity (Slow food video in ITA): https://www.youtube.com/watch?v=pjqJ37SmZeo























	 Publications by Italian Environment Ministry and LIPU about CC and LIPU: https://www.minambiente.it/sites/default/files/archivio/allegati/bi odiversita/cambiamenti_climatici_biodiversita.pdf
Observations	The teacher can ask students to produce self-evaluation criteria at the beginning of the Project. Visitors can be more involved through satisfaction questionnaire and competition (visitors vote for the best poster through different categories).



















































ΖΩΗ ΣΤΗ ΘΑΛΑΣΣΑ

Ο ΠΑΝΑΡΧΑΙΟΣ ΚΑΤΟΙΚΟΣ ΤΩΝ ΕΛΛΗΝΙΚΩΝ ΘΑΛΑΣΣΩΝ

Επτά είδη θαλάσσιων χελωνών συνεχίζουν να κολυμπάνε στις θάλασσες της Γης για περισσότερα από 100 εκατομμύρια χρόνια. Στη Μεσόγειο συναντάμε τρία από αυτά: την πράσινη θαλασσοχελώνα (Chelonia mydas) και την καρέτα (Caretta caretta) που γεννούν τα αυγά τους στη Μεσόγειο και τη δερματοχελώνα (Dermochelys coriacea) που θεωρείται επισκέπτης από τον Ατλαντικό.



Η καρέτα αποτελεί ένα από τα πιο εμβληματικά είδη των μεσογειακών και ελληνικών θαλασσών.

Η ΕΛΛΑΔΑ ΦΙΛΟΞΕΝΕΙ ΤΟ 60% ΤΩΝ ΦΩΛΙΩΝ ΚΑΡΕΤΑ ΣΤΗ ΜΕΣΟΓΕΙΟ

Οι Caretta caretta (Lindaeus, 1758) εξαπλώνονται σε όλες τις θάλασσες αν και συγκεντρώ-Οι Caretta caretta (Linnaeus, 1758) εξαπλώνονται σε όλες τις θάλωσσες αν και συγκεντρώ-ονται κυρίως στα είνερται και υποτροπικά γεωγραμέα μίρις (Πεσόγειος, Ατλαντικός, Ερηνικός και Ινδικός ωκταινός). Ο παγκόσμιος πληθυσμός του είδους αποτελείται από 10 υπο-πληθυσμός που συναντώνται σε διαφορετικές περιοχές, διαφέρουν σε μέγεθος και παρουσιάζουν διαφορετικές τάσεις, Ανάμεσα σε αυτούς, ο μεσογειακός υπο-πληθυσμός της καρέτα παραπηρείται σε όλη τη Μεσόγειο. Προέρχεται από τον πληθυσμό του Ατλαντικού εμφανίζοντας ένα βαθμός ενετικής διαφοροπόμητης, Ωπόσο χελώνες καρέτα από τη Μεσόγειο έχουν παραπηρηθεί και σε νερά του Ατλαντικού.



Τα ζώα που φωλιάζουν στη Μεσόγειο είναι συγκριτικά μικρά, με μήκος σώματος 75-100 εκ. και βάρος 100-135 κιλά, αν και έχουν παρατηρηθεί και πολύ μεγαλύτερα ζόα. Το κεφάλι είναι σχετικά μεγάλο με κεράτινο ράμφος και χωρίς δόντια. Το χέλωο (καβούκι) έχει σχήμα συνήθως επίμηκες, οβάλ ή καρδιόσχημο με μια κεντρική σειρά πέντε ραχιαίων πλακών και άλλες πέντε στα πλευρά. Τα πρόσθια πτερύγια έχουν δύο νύχια και τα πίσω δύο ή τρία. Οι χελώνες καρέτα ζουν έως 100 χρόνια.

WWF Hellas













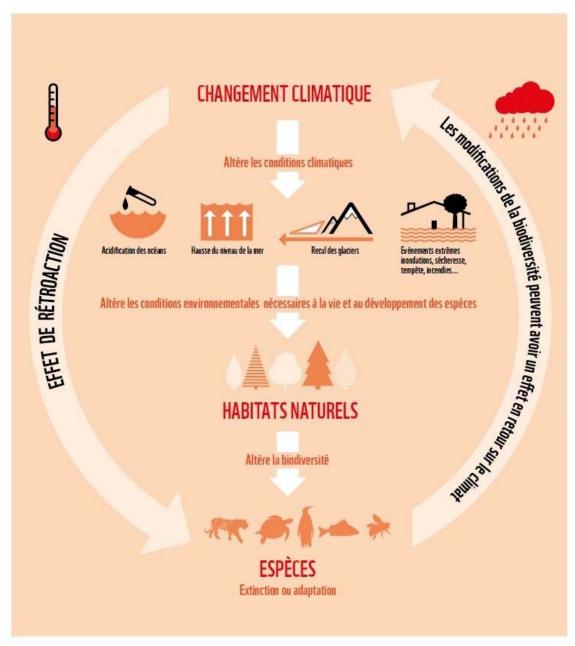












WWF France - 2015







































