

PROTECT OUR DUNES



A sand dune is a hill or ridge of sand that has been piled up by the wind

Sand dunes may form wherever there is a lot of loose sand and enough wind to move it. Beaches and deserts are common places for dunes.

Sand dunes are a really important landform. They may seem tough as they offer protection from ocean storms surges and high seas. However, they are fragile and it is important to know how to protect them.

ALL ABOUT SAND DUNES

History of Ireland's Sand Dunes

Ireland's sand dunes have been developing for about 5,000 years. The sand on them comes from glacial deposits and over time it has been shaped by the tide and wind to create the sand dunes we see at the beach today.

The sand in dunes is always moving. It can end up on the beach or can be taken out to sea by waves to form offshore sandbanks. As a result, the seashore and sand dunes are always changing shape, through processes known as erosion and deposition.



Erosion and Deposition

Erosion happens when the dunes lose sand. Sand and beach material can move from one place to another by natural processes, such as wind and wave action. Natural erosion usually happens in the winter, when sand is swept away from the front dunes by strong waves and left out at sea in sandbanks.

Deposition happens when the dunes gain sand. Sand is carried by the wind or waves and builds up in other areas along the coastline.

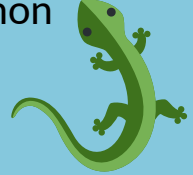
Deposition on dunes usually takes place in summer, when sand from the sandbanks formed in winter is blown back up onto the beach and the dunes by the wind.



ALL ABOUT SAND DUNES

Biodiversity of Dunes

Dunes are an important and protected habitat by law. They have many wonderful plants and animals living on them, such as the common lizard, butterflies, sea holly, orchids and ground nesting birds.



The main plant you will see growing on sand dunes is called Marram Grass. It has a deep tangled root network that holds the dunes in place and makes them stable. The grass also catches any sand that is blown onto it from the beach, helping the dune to grow taller, and preventing sand from reaching land, streets, and buildings.

Human Impacts

Unfortunately, humans can cause dunes to lose sand. Recreational activities on the dunes such as walking, horse riding, camping, and setting up barbeques can harm this important habitat. When we move through the dunes we erode the marram grass that grows there and this uncovers the sand beneath. The wind then starts to blow this exposed sand away, causing part of the dune to disappear. This is called a **blowout**.

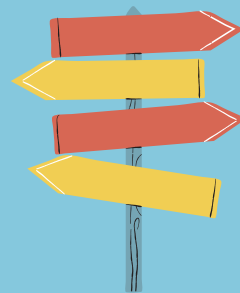


This sand can end up blowing onto land, buildings, and roadways causing lots of problems for local communities. Blowouts also create openings in the dunes, allowing water to flow freely from the ocean onto land, flooding homes and businesses.



WHAT CAN WE DO TO PROTECT SAND DUNES?

- Educate ourselves about the importance of sand dunes
- Spread awareness
- Help out your local community group with 'marram grass planting'
- When we visit the beach, we should:
 - stick to pathways
 - avoid playing on the dunes
 - follow local signage



For more information

- Visit the 'Protect Our Dunes' webpage
- Visit the [Clean Coasts](#) Website



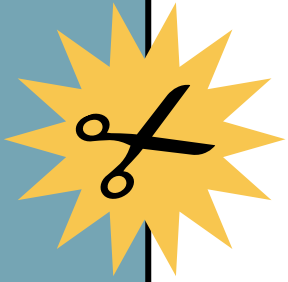


WORDSEARCH

Find the hidden words associated with sand dunes.

L L K Z F E S F B H Y C M V E R O S I O N W Y S K
J D G B R W V L W L O I W A H Z T O D N P H Y U K
U G G E I F V Z K K O R U J R T G M M U C C L K O
M K P C D T E T S E Z W S W U R D D K B I A D N W
S Z G N N K A E S C U O O E G B A H R D X J Y A H
Q E V T Y S V F K K M F Z U R F G M M B L M A Q U
T H A P W R H T G B A K Q Q T I R B G J V O Z D T
N H U H E S O J T H Y N Q S Q J D F F R J O S A R
N V A K O W H F P Q T S X H Z I B I A C A G N P A
Q X S L H L G F J T Z S B M K D M I N J L S L H M
J T C M P F L B J N R L X I O G W W R G E I S M P
F O T A L G N Y G A N M A T N S U R N D B D B H L
W C O M M O N L I Z A R D L G D Z A K V S O J Y I
X U K Z D K F A E Z I Z L Z X Z D J S W H E W E N
B W O C K Y L O B U T T E R F L I E S A F B P P G
L Z L G Q C P C B B Q S F G K A K M H F N E X Y N
Z Q W B K K K E R C H T H D U R X O G H W D F Y L
W O I G Z G L H O T I S P F N Y O L I B P J U K J
G V B I O D I V E R S I T Y X E X K W X W O E I V
X X R Q S T P P R Z U L K P X X O V H I V G T C X
R G W I C S H O O P R O T E C T I O N Z J O J A C
P I C V F F R S O W B X W D E S R O R C H I D S N
Q Z T T K A W A T R K Q Z A J G H F M B J D T W G
P J D N S C K Z S X B H A B I T A T R Z L D V I I
E V Y V J K W V I V K O X Z F U B H E C E T S O H

COMMON LIZARD	BIODIVERSITY	MARRAM GRASS	BUTTERFLIES
HORSE RIDING	PROTECTION	TRAMPLING	SEA HOLLY
HABITAT	EROSION	ORCHIDS	BIRDS
BLOW OUT	SAND	BBQS	ROOTS



MAKE A LIZARD BRACELET

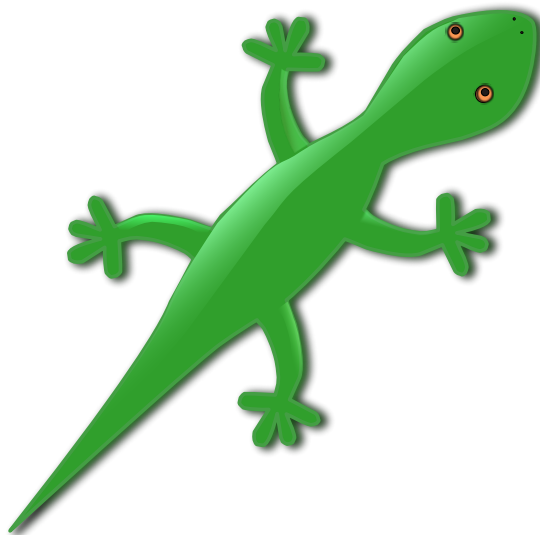
How to make a lizard paper bracelet

What you need:

- Paper
- Scissors
- Glue stick
- Colouring pencils/markers/crayons

Instructions

- Print the bracelet template (See Appendix 1)
- Colour it in
- Cut it out
- Glue it together



ACTIVITY



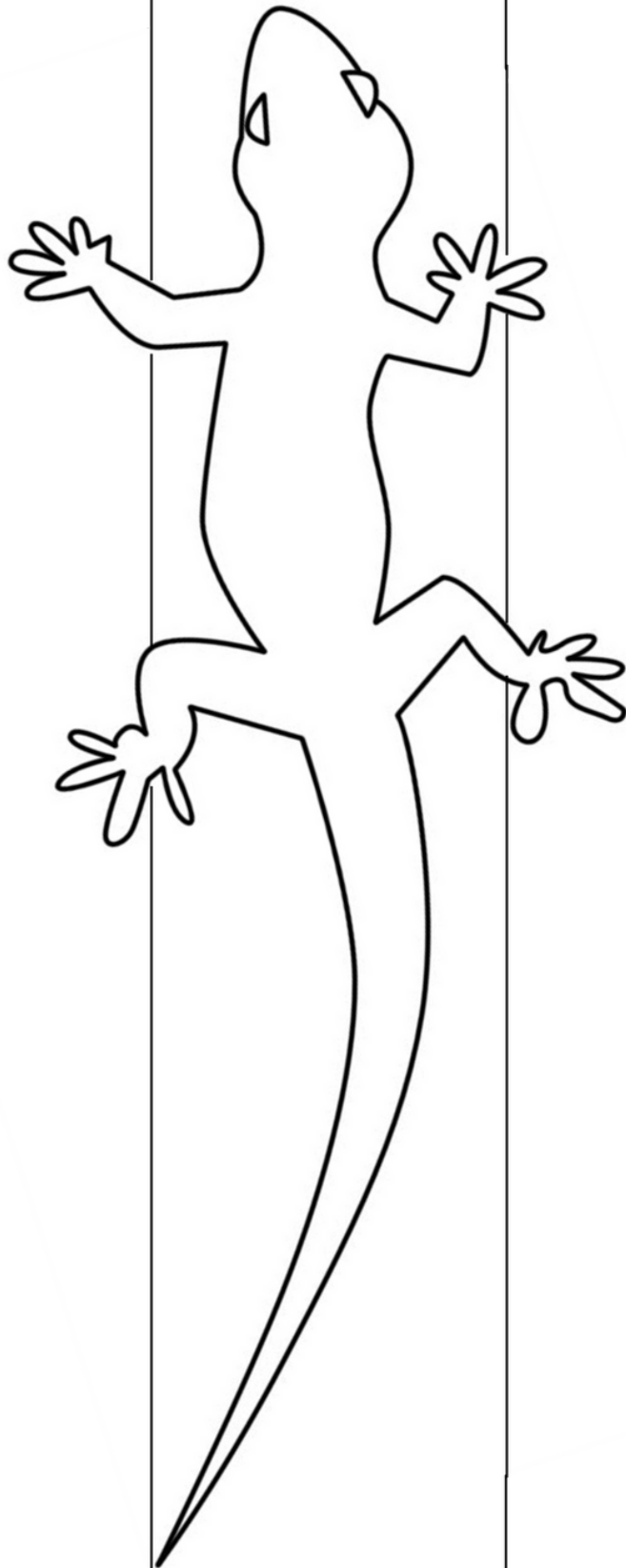
If you visit the beach this summer, help spread the message to 'Protect Our Dunes'. Using sand, stones, shells or other beach debris, create a piece of art that will communicate the message that dunes are special and need protecting.

You can share your art on social media (with permission and assistance by parents/guardians) using **#ProtectOurDunes**



APPENDIX 1

#ProtectOurDunes



#ProtectOurDunes