







"Ostatnia szansa – zachowanie bioróżnorodności dla następnych pokoleń" (2015-1-PL01-KA219-016980 3)

Protection of animals and plants species in Wolin National Park. Endemic species in Pomerania.





- Wolin National Park was established in 1960.
- This is one of two parks in Poland of <u>a maritime</u> <u>character</u>.
- Wolin National Park covers with protection the biggest island in Poland – Wolin Island.



- In 1996 the boundries of the park were expanded by the area of 1mile of the Baltic Sea, the islands of the delta of the Świna River together with the surrounding waters of the Szczecin Lagoon.



- The park is under the project: "Improving the conditions for implementation of the tasks protecting non-forest land and water ecosystems".
- The aim of the project is to <u>stop degradation</u>, <u>improving condition</u> <u>of the habitats and</u> <u>species protection</u>.
- The park is protecting biodiversity at all three levels:
 - ✓ genetic variation
 - ✓ species variation
 - ✓ ecosystem variation.

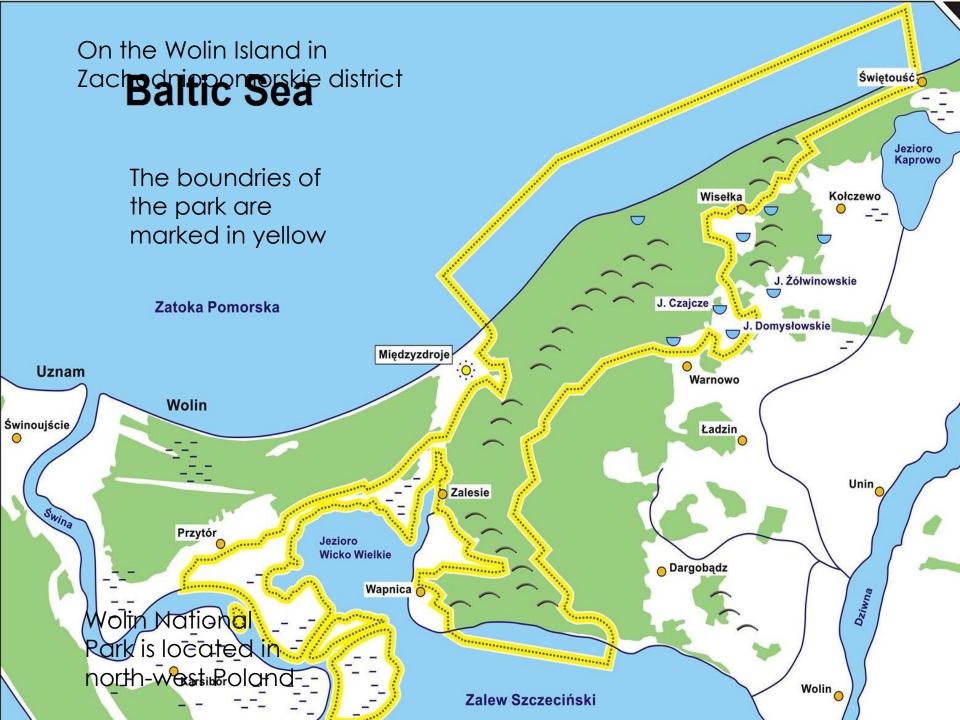
There are many various ecosystems in WNP, such as:



SYMBOL



- In the middle of the symbol, there is a white -tailed eagle and a sprig of sea holly at the bottom.
- The whole is in green color.
- There is also a white inscription with the name of the park on the edges.



To intensify the degree of nature protection, there were established 6 areas of strict protection:

- 1. Area of strict protection named dr Stefan Jarosz
- 2. Area of strict protection named prof. Marian Raciborski
- 3. Area of strict protection named prof. Zygmunt Czubiński
- 4. Area of strict protection named dr Bogdan Dyakowski
- 5. Area of strict protection named prof. Władysław Szafer
- 6. Area of strict protection named prof. Adam Wodziczka

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In addition, there were established:

- Special area of habitats' protection "Ujście Odry i Zalew Szczeciński"
- Special protection area for birds "Delta Świny"
- Nature Reserve "Łuniewo"

1.

Carpinus betulus L. (European hornbeam)

Area of strict protection named dr Stefan Jarosz

The aim of protection: species protection of European beech, sessile oak, European hornbeam and sycamore maple.



Acer pseudoplatanus L. (Sycamore maple)



Fagus sylvatica L. (European beech)



Quercus petraea (Sessile oak)

Pomeranian beech forest association





The following species occur in natural conditions in the pomeranian beech forest ecosystem.



Area of strict protection named prof. Marian Raciborski

The aim of protection: species protection of sword-leaved helleborine, woodbine and twinflower, which are included in orchid beech forest.



Linnaea borealis (Twinflower)



Cephalanthera longifolia (Sword-leaved helleborine)



Lonicera periclymenum L. (Woodbine)

Orchid beech forest association





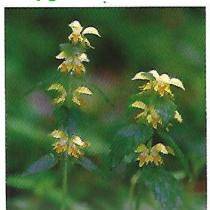
The following species occur in natural conditions in orchid beech ecosystem.



Leucobryun glaucum



Polygonatum









Lamium galeobdolon Cephalanthera rubra Neottia nidus-avis Epipactis atrorubens Platanthera bifolia

3.

Area of strict protection named prof. Zygmunt Czubiński

The aim of protection: species protection of royal lady's slipper and military orchid.



Cypripedium reginae (Royal lady's slipper)



Orchis militaris L. (Millitary orchid)

4. Second Second

Area of strict protection named dr. Bogdan Dyakowski

The aim of protection: species protection of wood melick, wood sorrel and false lily of the valley.



Oxalis acetosella L. (False lily of the valley)



Maianthemum bifolium (Wood sorrel)



Melica uniflora (Wood melick)

Luminos beech forest association





The following species occur in natural conditions in luminos beech ecosystem.

5.

Area of strict protection named prof. Władysław Szafer

The aim of protection: species protection of coralroot bittercress, wood anemone and sweet woodruff.



Dentaria bulbifera L. (Coralroot bittercress)



Anemone nemorosa L. (Wood anemone)



Galium odoratum (Sweet woodruff)

Pomeranian beech forest association





The following species occur in natural conditions in the pomeranian beech forest ecosystem.

6.

Area of strict protection named prof. Adam Wodziczka

The aim of protection: protection of a single oak Wolinian and xerothermic vegetation.



Oak Wolinian



Stachys recta L. (Stiff hedgenettle)



Anthericum liliago L. (St. Bernard's lily)



Carex humilis L. (Dwarf sedge)

Xerothermic vegetation assiociation



pratensis

hirundinaria

carthusianorum



Nature Reserve "Łuniewo"

- The reserve covers Łuniewo lake and moss.
- The aim of protection: protection of the moss ecosystem along with all protected species occuring there.





Species protected in Nature Reserve "Łuniewo"



Lycopodiella inundata (Marsh clubmoss)



Osmunda regalis (Royal fern)



Drosera rotundifolia (Round-leaved sundew)



Matteuccia struthiopteris (Ostrich fern)

Special area of habitats' protection "Ujście Odry i Zalew Szczeciński"

• The aim of protection: species protection of aquatic plants and halophytes.



Lemna minor L. (Lesser duckweed)



Plantago maritima L. (Sea plantain)



Nymphaea alba (White water-lily)



Glaux maritima (Sea milkwort)

Special protection area for birds "Delta Świny"



Calidris pugnax (Ruff)



Sterna hirundo (Common tern)



(Mediterranean gull)



Tringa totanus (Common redshrank)

Special protection area for birds "Delta Świny"



Aster tripolium L. (Sea aster)



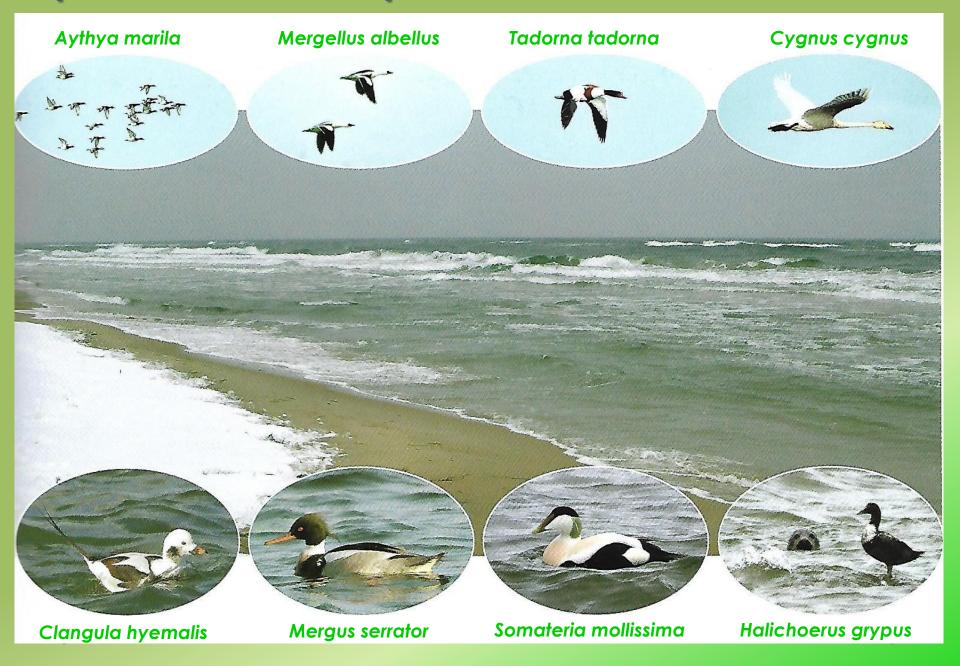
Hierochloë odorata (Sweet grass)



Juncus gerardi (Blackgrass)



Allium angulosum L. (Mouse garlic)







Meles meles (European badger)



Coronella austriaca (Smooth snake)



Hyla arborea (European tree frog)



Acronicta aceris (Sycamore moth)



Polyommatus icarus (Common blue)



Sympetrum flaveolum (Yellow-winged darter)



Acipenser oxyrinchus (Atlantic sturgeon)

Endemic species of Wolin National Park

Bison bonasus (European bison)



- European bison is the <u>biggest</u>
 wild living mammal in Europe.
 Bull's weight is from 440 to 920 kg
 and the cow's between 320 and
 640 kg.
- Its diet consists mainly of grass and herbaceous plants, as well as in winter and early spring
 bark and stems of some trees.
- is a massive front part of the body and a lower part of the back.

Bison bonasus (European bison)



- "The International Society for the Protection of Bison" was established in Poland. That is why our country became the world's biggest center of inbreeding that species. That society brings together 16 countries, which are executing the restitution and reintroduction of European bison.
- There were only 54 individuals of European bison left worldwide after the First World War. Only 12 were suitable for further breeding.
- Currently in Poland there are 1566 individuals of european bison, including 7 that live in Wolin National Park.

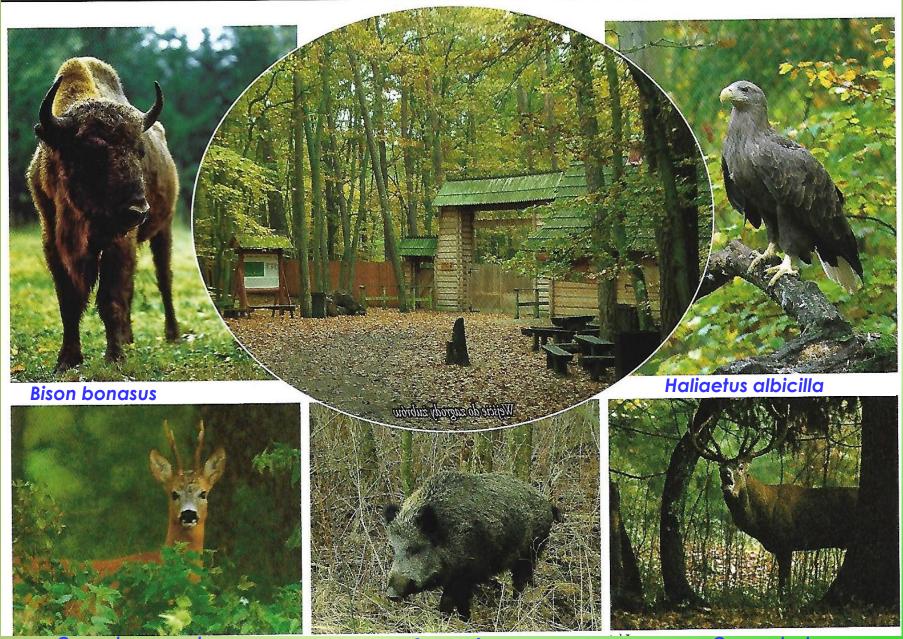
European bison reserve in Wolin National Park



The European bison reserve was established in 1986.

The reserve covers and area of 28 ha, in which bisons have an area of 20 ha of their farm.

Besides this species, there are also other animals such as boars, deer or stags. All of them are provided with appropriate veterinary care.



Capreolus capreolus Sus scrofa Cervus elaphus

European bison reserve in Wolin National Park



- The amount of bisons in different periods of time varies from 6 to 12. <u>Currently there</u> <u>are 7 individuals of this</u> <u>species there.</u>
- At the beginning there were only 4 bisons in the reserve, from which only 2 could be used for further breeding.
- Every year there are
 1-2 calves born.
- All names of the bisons start with the letters "PO" from the word "POLAND" (Poznaniak, Polanin, Posawa).

Haliaetus albicilla (White-tailed eagle)



- It's <u>the biggest predator</u> nesting in Poland.
- White color takes its tail from the age of 5. The rest of the plumage is brown.
- Its diet contains mainly fish, water birds and sometimes even mammals like small deer.



- Males and females form stable pairs, tied to the nesting sites throughout the year.
- Their nest are getting larger through many years and can get to the height of 4 meters and weight of 1 ton.

Haliaetus albicilla (White-tailed eagle)





- White-tailed eagle is considered as <u>the king of</u> <u>birds</u> and this species can be seen <u>in the Polish emblem</u>.
- At the beginning of 20th century there lived only 20 nesting pairs in Poland.
 Currently there are about 750 nesting pairs in Poland.
- That was made possible by well carried restitution and reintroduction, which consisted of taking small chicks from nests and taking them to areas, where this species was exterminated.

White-tailed eagle in Wolin National Park



Lucanus cervus (Stag-beetle)



- Both larvae and imago (adult forms) <u>exist in old oak trees.</u>
- This species <u>had once a wide</u>
 range of occurence, but
 it is now on danger of
 extinction, because of
 vanishing of old oak trees.
- Its diet contains <u>mainly juice</u> from tree trunks.
- The powerful and big mandibles enable them to pinch in the bark of the tree and reach the juice. They are also used to fight with other individuals.

Lucanus cervus (Stag-beetle)



 Although it's one of the biggest beetles in Poland, it is currently more and more unlikely to meet a stag-beetle in Wolin National Park, because of vanishing of old oak trees.

Acrocephalus paludicola (Aquatic warbler)



- It stays <u>from April to August</u> in Poland.
- It feeds on <u>arachnids</u>.
 It builds its nests low over the ground.
- It has <u>very high demands of living</u>. It lives only in bogs and wetlands overgrown with sedge.
- It is very interesting, that males don't take care of their offsprings.

Acrocephalus paludicola (Aquatic warbler)



- This species is in danger of extinction, <u>because of</u> <u>disappearance of its natural</u> habitats.
- It is the rarest and the only songbird globally in danger of extinction.
- Delta of the Świna river is a very important habitat of this species.
 There, in Wolin National Park, is staying 1-3% of world's population of the aquatic warbler.
- Currently there are carried many protecting actions like: monitoring, buying areas where the species stays or education, which increases the awareness of the danger of extinction of this beautiful bird.

Eryngium maritimum (Sea holly)



- It is <u>a typical species</u> in Wolin National Park.
- It grows <u>only on coastal</u> dunes in Poland.
- Its seeds are carried by animals, but in its natural habitat, it reproduces primarily vegetatively.
- It is a <u>photophilous plant</u>, which is very resistant to wind and drought.

Eryngium maritimum (Sea holly)





- Its amount of individuals decreased recently, because of <u>forestation of the</u> <u>coastal dunes and</u> <u>transplanting to gardens as</u> <u>a decorative plant.</u>
- A few years ago there was carried <u>a reintroduction of</u> <u>the sea holly.</u>
- The current process of forestation of the coastal dunes is a danger for the sea holly, because it doesn't tolerate the shadow.

Luscinia svecica (Bluethroat)



- It is a small bird which is classed as a member of old world flycatcher.
- It has <u>a characteristic</u> <u>colorful plumage</u> on its throat.
- It leads a lonely life among dense vegetation (generally river valleys and areas close to bodies of water).
- It feeds on <u>insects</u> and in autumn also on <u>blueberries</u>.

Luscinia svecica (Bluethroat)



- Bluethroat is under strict legal protection and listed in Polish Red Data List as a species in danger of extinction.
- The decreasing amount of individuals is caused by vanishing its natural habitats by draining wetlands.