

Ochrana přírody / Nature Conservation – 2017

- 1) - Úvod: vymezení předmětu, osnova přednášky, literatura
Introduction: subject definition, course outline, literature
- Vývoj ovlivňování přírody člověkem: od lokálního měřítka po globální
The development of human influence on nature: from the local to the global scale
- Historie ochrany přírody / History of nature conservation (18. 9.)

25. 9. no class

- 2) - Historie ochrany přírody / History of nature conservation
- Biologická diversita, její hodnota a míra ohrožení;
Biological diversity, its value and level of threat (postponed, will be added
on another day (2. 10.)
- 3) Ohrožení druhů lovem (sběrem, tj. přímým pronásledováním člověkem,
udržitelné využívání divokých populací) / Threat to species by hunting (or
collecting, i.e. direct human action, sustainable use of wild populations) (9. 10.)
- 4) - Ohrožení přírody introdukcí nepůvodních druhů (predátorů, konkurentů; invazní
druhy...) / Threat to nature by the introduction of exotic species (predators or
competitors; invasive species...) (16. 10.)

- 5) Ohrožení přírody fragmentací a destrukcí biotopů (okrajový efekt; ostrovní ekologie; důsledky pro koncepci chráněných území; ekologická kontinuita a konektivita)
Threat to nature due to habitat fragmentation and destruction (edge effect; island ecology; consequences for the design of reserves; ecological continuity and connectivity) (23. 10.)
- 6) Pokračování z minula, ekologická kontinuita a konektivita / Continuation from last week, ecological continuity and connectivity (30. 10.)
- 7) Znečištění životního prostředí: acidifikace, eutrofizace, znečištění vod vč. moří, globální oteplování / Environmental pollution: acidification, eutrofication, pollution of water bodies including the seas, global warming (6. 11.)
- 8) Využití populační biologie v ochraně přírody (druhová ochrana: minimální životoschopná populace; metapopulace; základy populační ekologie a genetiky; minimální dynamické území; analýza životaschopnosti populace) (13. 11.)
Utilization of population biology in nature conservation (species conservation: minimum viable population; meta-populations; basics of population ecology and genetics; minimum dynamic area; population viability analysis)

- 9) Reintrodukce druhů do volné přírody (ochrana druhů in situ / ex situ: podpůrná opatření; záchranné chovy, reintrodukce; příklady reintrodukovaných druhů) (20.11.)
Reintroduction of species (species conservation in situ / ex situ: supporting measures; breeding in captivity, reintroductions; examples of reintroduced species)
- 10) Nástroje ochrany přírody (metody zjišťování stavu a sledování vývoje populací a společenstev vč. posouzení z hlediska ochrany přírody: inventarizace, monitoring, mapování, červené seznamy), legislativa (mezinárodní úmluvy, instituce a programy ochrany přírody, biosférické rezervace, legislativa EU a ČR, obsah a členění českého zákona o ochraně přírody a krajiny...) (27.11.)
Conservation tools (how to assess the state and monitor the development of populations and communities, including their evaluation from the nature conservation point of view: inventories, monitoring, mapping, red listing), legislation (international conventions, institutions and programmes on nature conservation, biosphere reserves, overview of relevant Czech and EU legislation, content and structure of the Act on the conservation of nature and landscape of the Czech Republic)
- 11) Legislativa (mezinárodní úmluvy, instituce a programy ochrany přírody, biosférické rezervace, legislativa EU a ČR (přehled) / Legislation (international conventions, institutions and programmes on nature conservation, biosphere reserves, overview of relevant Czech and EU legislation) (4. 12.)
- 12) Pokračování z minula / Continuing from last week (11. 12.)

Ochrana přírody – literatura (literature – in Czech):

Richard B. PRIMACK, Pavel KINDLMANN a Jana JERSÁKOVÁ:

Biologické principy ochrany přírody (Portál, Praha, 2001, ISBN 80-7178-552-0),

vícero výtisků k dispozici v knihovně

[Richard B. Primack: Essentials of Conservation Biology \(Sinauer Associates\)](#)

Richard B. PRIMACK, Pavel KINDLMANN a Jana JERSÁKOVÁ:

Úvod do biologie ochrany přírody (Portál, Praha, 2011, ISBN 978-80-7367-595-0)

V podstatě 2. vydání učebnice výše pod jiným jménem, vícero výtisků v knihovně

Filip KOLÁŘ et al.: **Ochrana přírody z pohledu biologa**, Dokořán, Praha, 2012,

ISBN 978-80-7363-414-8 (nebo také BALÁŽ et al. 2010:

http://www.biologickaolympiada.cz/files/brozura10_web.pdf)

(Igor MÍCHAL: **Ekologická stabilita**, Veronica a Min. životního prostředí ČR, 1992.)

Edward O. WILSON: **Rozmanitost života**, [The Diversity of Life \(first publ. 1992\)](#)

Nakladatelství Lidové noviny, Praha, 1995, ISBN 80-7106-113-1

(Michael BEGON, John L. HARPER a Colin R. TOWNSEND:

Ekologie - jedinci, populace a společenstva,

Vydavatelství univerzity Palackého, Olomouc, 1997. ISBN 80-7067-695-7)

[Ecology – individuals, populations and communities /4th edition from 2006: Ecology](#)

[- From Individuals to Ecosystems \(Blackwell Publishing\)](#)

Vymezení ochrany přírody

Definition of Nature Conservation

- Ochrana přírody jako idea a činnost / Conservation as an idea and activity
- Vymezení pojmu příroda / What is nature?
 - Jsou člověk a jeho výtvořiny součástí přírody?
Is man and his creations part of nature?
 - Je kulturní krajina součástí přírody?
Is the cultural landscape part of nature?
 - Je rozdíl mezi biosférou a přírodou?
Is there a difference between the biosphere and nature?
- Rozdíl oproti ochraně životního prostředí
Difference between nature conservation and environmental protection
 - Etická rovina ochrany přírody - právo na existenci
Ethical level of conservation – the right to exist
 - Odklon od antropocentrismu / Away from anthropocentrism

- Živá a neživá příroda / Living and inanimated (abiotic) nature
 - Ochrana biodiversity (rozmanitosti **živé** přírody)
Conservation of biodiversity (diversity of living nature)
 - Ochrana krajiny (příroda?)
Conservation of the landscape (nature?)
 - Ochrana geomorfologických prvků, geologických jevů a nalezišť (vč. paleontologických), atd.
Conservation of geomorphological structures, geological phenomena and collecting localities (incl. paleontological ones), etc.

Co to je příroda?
What is nature?

Přírodu kterého období
chceme chránit?

The “nature” of what historic
period do we want to protect?

Netknutá příroda / **Pristine
habitats** versus kulturní krajina
/ **cultural landscape**

Pralesy, rašeliniště, bažiny,
nеспoutané toky / **Virgin forests,
mires, swamps, unregulated rivers**

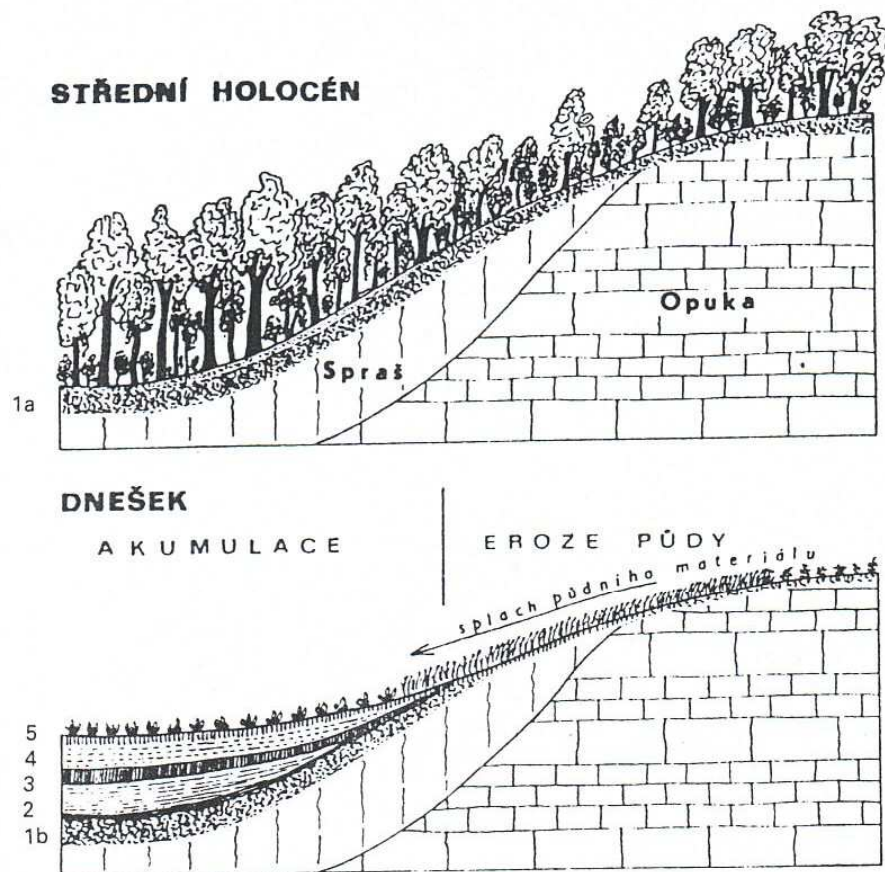
versus

louky, pastviny, vřesoviště,
suché trávníky ... / **meadows,
pastures, heathlands, xerothermic
grasslands...**

Přehled vývoje přírody a lidské kultury ve střední Evropě v průběhu polednové doby (holocénu)
podle Ložka (1984, cit. Kudrna a kol. 1988).

ABSOLUTNÍ STÁŘÍ	Běžné dělení	Nově navržené dělení	VÝVOJ BIOCENÓZ (Vegetační zóny střední Evropy)	Lidské kultury	OBDOBÍ
1000	SUBATLANTIK	SUBRECENT	VZNIK SOUČASNÉ KULTURNÍ KRAJINY STŘEDOVĚKÉ ODLESNĚNÍ	SLOVANÉ STĚHOVÁNÍ NÁRODŮ	MLADŠÍ
0		SUBATLANTIK	HLAVNÍ ROZMACH BUKOJEDLOVÝCH LESŮ	ŘÍM LATĚN HALŠTAT	
-1000	SUBBOREÁL	SUBBOREÁL	INTENSIVNÍ ODLESNĚNÍ — PASTVA	DOBA BRONZOVÁ	STŘEDNÍ
-2000		EPIATLANTIK	POSTUPNÉ ŠÍŘENÍ BUKU, JEDLE A POZDĚJI HABRU NA ÚKOR SMÍŠENÝCH DOUBRAV SMRČIN	DOBA BRONZOVÁ	
-3000	ATLANTIK	ATLANTIK	HLAVNÍ ROZMACH SMÍŠENÝCH DOUBRAV NA HORÁCH SMRČINY	NEOLIT POČÁTEK PŘEVÁŘENÍ PŘÍRODY ČLOVĚKEM	STŘEDNÍ
-4000		ATLANTIK	POČÁTEK BUKU, JEDLE	DOBA BRONZOVÁ	
-5000	BOREÁL	BOREÁL	NÁSTUP SMÍŠENÝCH DOUBRAV ŠÍŘENÍ SMRČKY	MEZOLIT	STARŠÍ
-6000		BOREÁL	SVĚTLÉ TAJGY BOROVICE, BRÍZA	NEOLIT POČÁTEK PŘEVÁŘENÍ PŘÍRODY ČLOVĚKEM	
-7000	PREBOREÁL	PREBOREÁL	ZALESNĚNÍ	MEZOLIT	STARŠÍ
-8000	MLADÝ DRYAS	MLADÝ DRYAS	ŘÍDKÁ TAJGA CHLADNÁ STEP	MEZOLIT	
-9000	ALLERÖD	ALLERÖD	ZALESNĚNÍ OJEDINĚLE NÁROČNÉ DŘEVINY	MEZOLIT	STARŠÍ
-10000	STARÝ DRYAS	STARÝ DRYAS	PŘEVLÁDÁ CHLADNÁ STEP	MEZOLIT	
				PALEOLIT MAGDALÉNIEN	STARŠÍ
				PALEOLIT MAGDALÉNIEN	
				PLEISTOCÉN	STARŠÍ
				POZDNÍ GLACIÁL	

... jako svědectví historických způsobů hospodaření v krajině, zdroj biodiversity
...as a testimony of historic ways of land use, source of biodiversity



- 1a – de-limed illimerised brown earth under a mixed oak forest in the middle Holocene
- 1b – rest of heavy soil with a secondary humus-rich horizon, covered by younger sediments
- 2 – older, thicker, humus-rich, less calcium-rich sediments
- 3 – secondary carbonate chernozem
- 4 – younger, weakly humic and more calcium-rich sediments
- 5 – secondary initial chernozem on sediments, gradually changing to shallow pararendzina on marly silicite (cz: opuka)

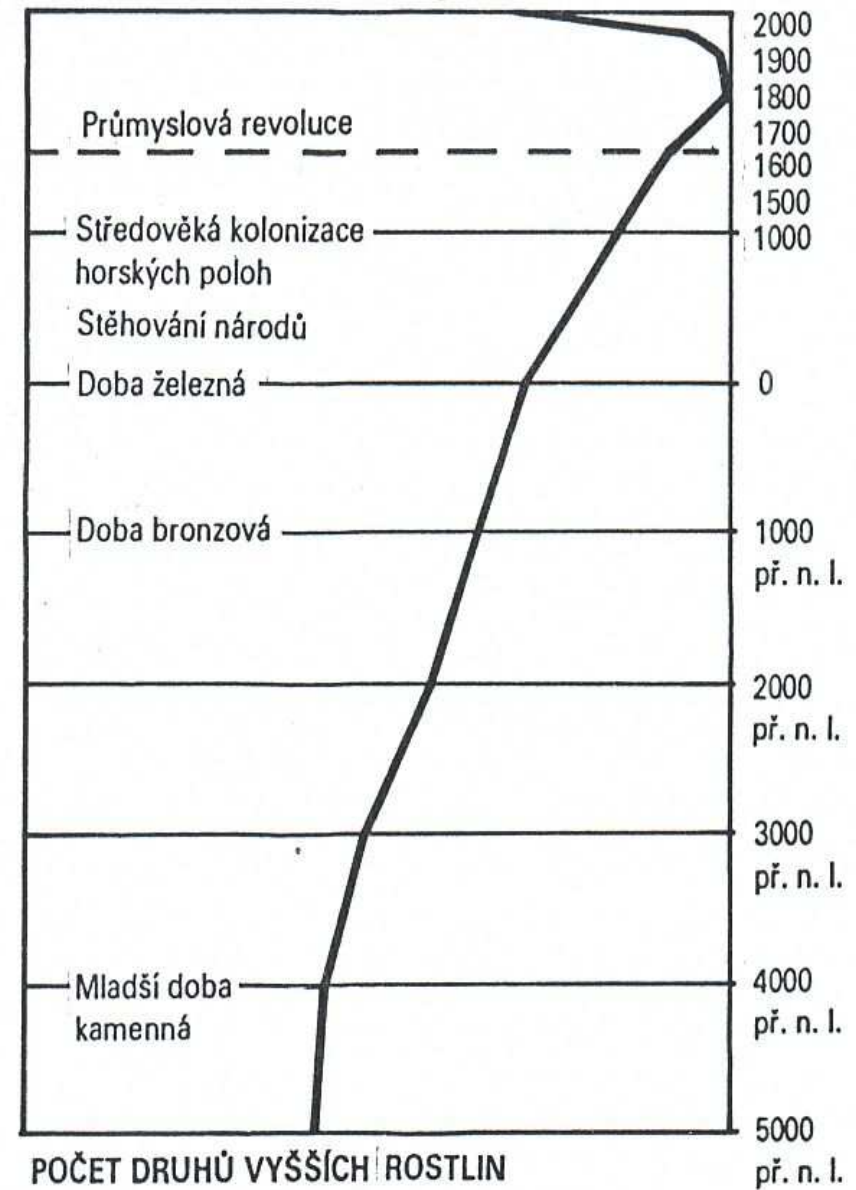
Obr. 12 Příklad vývoje ekotopů pod vlivem antropogenní eroze ve středním a mladém holocénu podle Ložka (1977):

- 1a – odvápněná ilimerizovaná hnědozem pod smíšenou doubravou ve středním holocénu
- 1b – zbytek téže půdy s druhotně vytvořeným humózním horizontem, překrytý mladšími splachy
- 2 – starší silnější humózní, méně vápnité splachy
- 3 – druhotná karbonátová černozem
- 4 – mladší slabě humózní a silněji vápnité splachy
- 5 – druhotná iniciální černozem na splacích, přecházející na opukovém substrátu do mělké pararendziny

An example of habitat development due to anthropogenic erosion in the middle and late Holocene (Ložek, 1977)

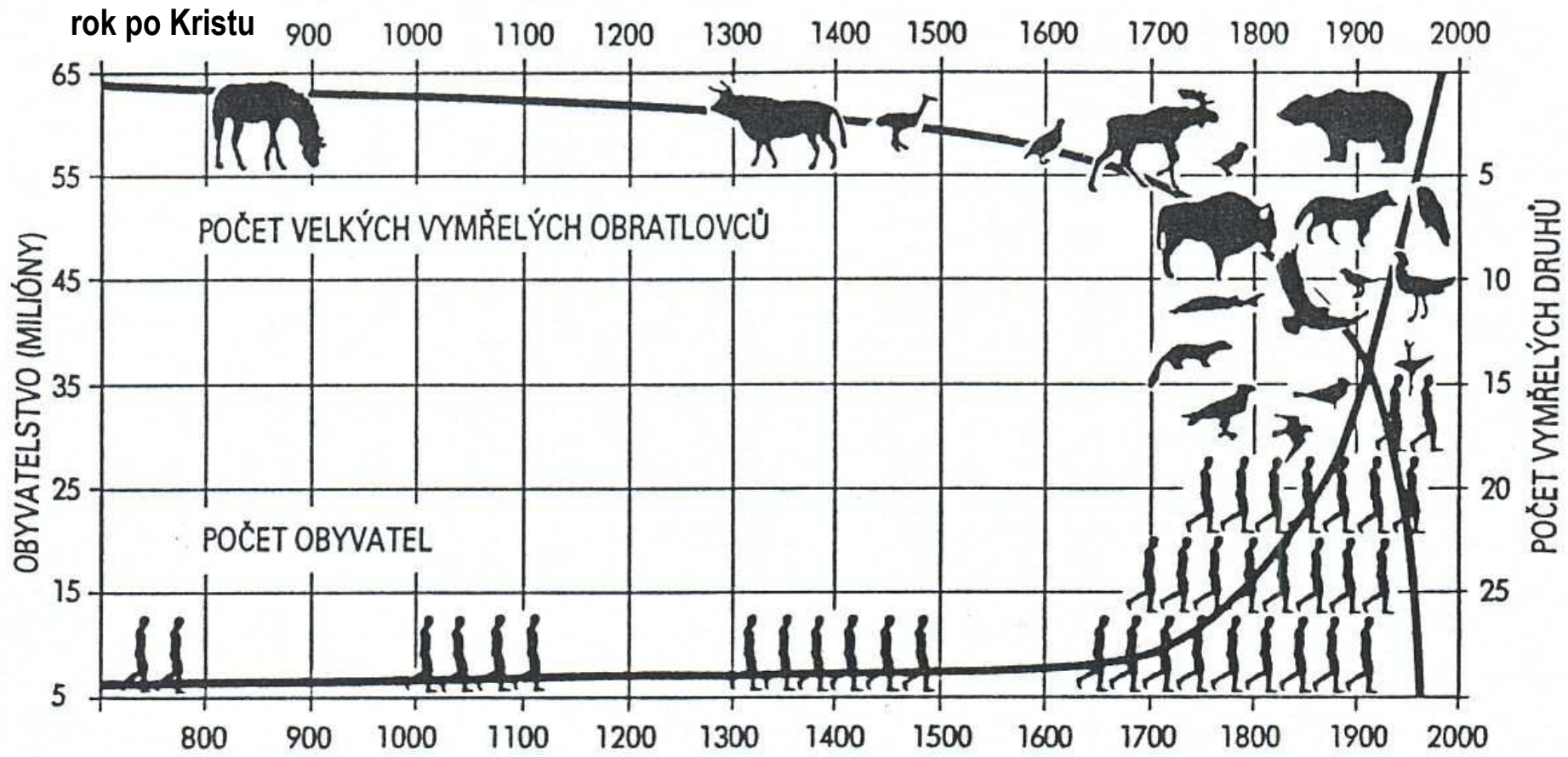
Schéma vývoje druhového bohatství vyšších rostlin ve střední Evropě.

The development of vascular plant species richness in Central Europe



Pozor: Posledních 500 let je na svislé ose převýšeno!

Vymírání velkých obratlovců ve srovnání s růstem lidské populace ve střední Evropě (na příkladu území bývalého západního Německa) od roku 700 n. l.
 The extinction of large vertebrates compared to the human population growth in Central Europe (territory of the former West Germany) from A. D. 700.



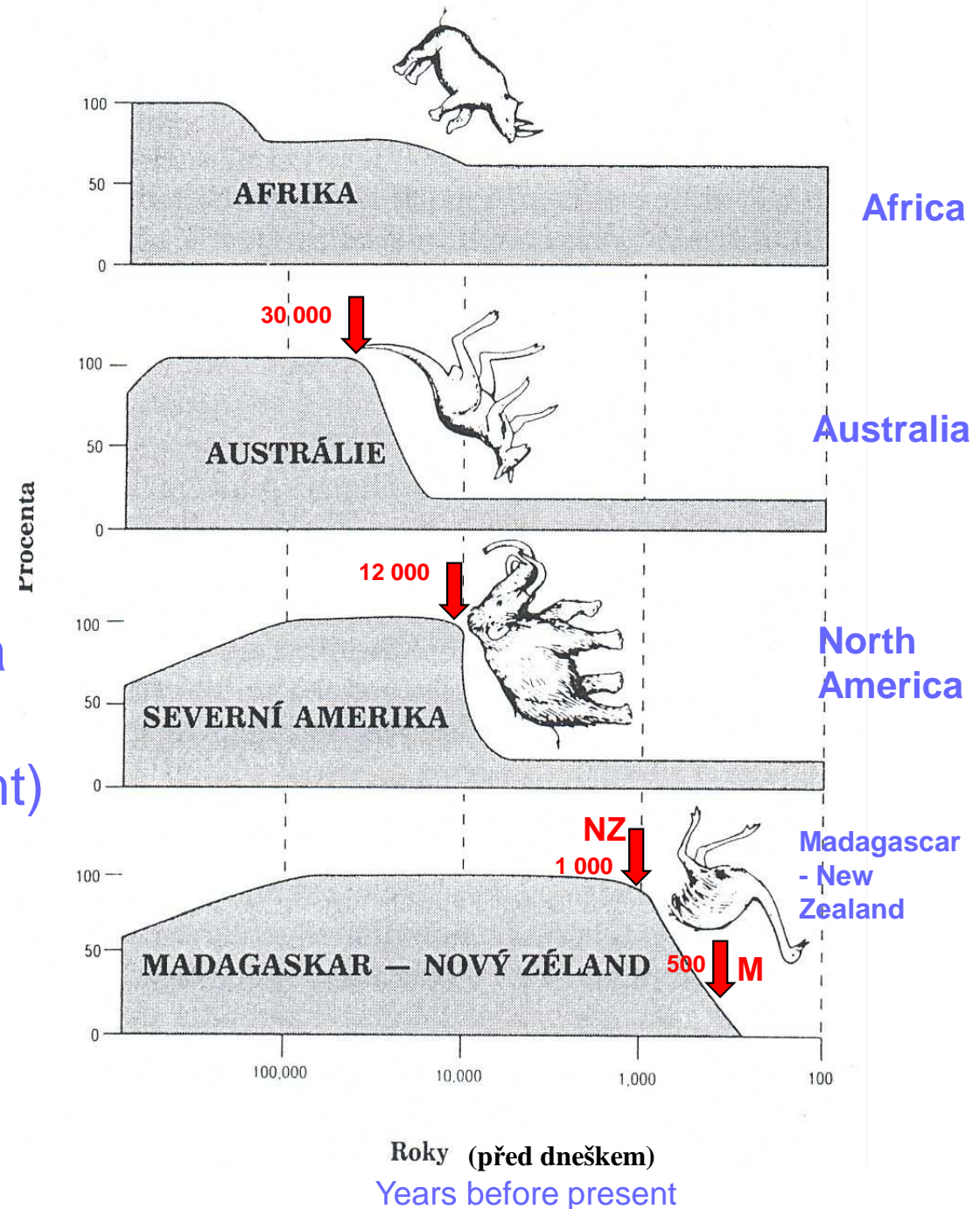
Přímá kauzální závislost?! / Direct causal dependence?!

Vymírání druhů
megafauny (velcí
savci a ptáci - nelétaví)

- jedná se o vyhubení po
příchodu člověka?

Extinction of megafauna
(large mammals and
birds – incapable of flight)

-due to extermination
after the arrival of man?



Co je „biologie ochrany přírody“? (1)

What is Conservation Biology? (1)

- Conservation biology

biologie ochrany přírody = ochranářská biologie

- Multidisciplinární obor / Multidisciplinary field

- populační biologie (genetika, ekologie) / population biology (genetics, ecology)
- biogeografie / biogeography
- biologie lovné zvěře, myslivost / Game Management
- rybářství / Fishing
- lesnictví / Forestry
- a další... / and others ...

Co je „biologie ochrany přírody“? (2)

What is Conservation Biology? (2)

- „Vznik“ oboru kolem r. 1980 / Emerged around 1980
 - 1st International Conference on Conservation Biology
 - 1978, San Diego, USA (M.E. SOULÉ)
 - Society of Conservation Biology - 1985, USA
 - časopis / journal Conservation Biology - 1987, USA
 - rychlý rozvoj oboru v USA a dalších zemích (hlavně anglického jazykového okruhu), přijetí do studijních plánů velkého počtu severoamerických universit
 - Fast development of the subject in the USA and other (mainly English-speaking) countries, adopted into the curricula of many North American universities
 - průnik do Evropy (výzkum na vysokých školách; překlad učebnic, např. 1995 – Německo, 2001 - Česko)
 - Penetration into Europe (university research; translation of textbooks, e.g. 1995 – Germany, 2001 – Czechia)

Co je „biologie ochrany přírody“? (3)

What is Conservation Biology? (3)

- Cíle / Objectives

- porozumět vlivu člověka na živou přírodu (druhy, společenstva, ekosystémy)

- To understand the effect of man on species, communities and ecosystems (live “nature”)

- vyvinout praktické přístupy a postupy k ochraně a obnově biodiversity (populací, společenstev, ...)

- To develop practical approaches and procedures to protect and restore biodiversity (populations, communities, ...)

- Metody / Methods

- aplikace a kombinace poznatků z různých relevantních oborů

- Application and combination of knowledge gained in various relevant fields of research and human activity

- výzkum přímo zaměřený na řešení konkrétních otázek

- Research directly focused on resolving concrete questions

Historie ochrany přírody (1)

History of Conservation (1)

- **4 vývojová období / 4 rozměry**

- / 4 phases of development / 4 dimensions**

- Činnost jednotlivců (šlechticů, mecenášů, vzdělavců)

- Efforts of individuals (noblemen, benefactors, scholars)**

- Činnost dobrovolných (občanských) spolků

- Efforts of voluntary (civic) clubs and societies**

- Činnost státu - státní ochrana přírody

- Efforts of the state – governmental conservation**

- Mezinárodní spolupráce (mezi státy, institucemi, nevládními organizacemi; vznik mezinárodních institucí a organizací)

- International cooperation (between countries, institutions, NGO's; foundation of international institutions and organisations)**

Historie ochrany přírody (2)

History of Conservation (2)

- Činnost jednotlivců (šlechticů, mecenášů, vzdělavců)
Efforts of individuals (noblemen, benefactors, scholars)
 - ochrana přírodních výtvorů, území, druhů
protection of natural formations, areas, species
 - ochrana statická (vyloučení zásahů)
static protection (exclusion of interference)
 - např. pralesní rezervace v již. Čechách
for instance virgin forest reserves in South Bohemia
- Činnost dobrovolných (občanských) spolků
Efforts of voluntary (civic) clubs and societies
 - rozšíření zájmu existujících spolků na ochranu přírody
(přírodovědné, vlastivědné, turistické, alpinistické spolky)
extension of interest of existing societies into conservation
(naturalists, homeland clubs, hiking and mountaineering clubs)
 - propagace myšlenky na veřejnosti
promotion of ideas in the public
 - získávání prostředků na vykupování ohrožených území apod.
fund raising for the acquisition of threatened areas etc.

Historie ochrany přírody (3)

History of Conservation (3)

- Činnost státu - státní ochrana přírody
Efforts of the state – governmental conservation
 - uzákonění ochrany přírody / conservation legislation
 - vyhlášení státem chráněných území / founding of protected areas
 - ustavení státních institucí k ochraně přírody / establishing national institutions entrusted with conservation
- Mezinárodní spolupráce / International Cooperation
 - mezinárodní dohody (úmluvy, konvence atd.) / international agreements (treaties, conventions, etc.)
 - mezinárodní instituce ochrany přírody / international institutions
 - mezinárodní konference s tematikou ochrany přírody / international conferences on conservation
 - spolky s mezinárodní působností (nevládní organizace) / societies with international activities (non-governmental organisations)

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Beginnings of nature conservation and environmental protection in dates (1)

2700 B.C.	Decree to protect remaining forest remnants – city of Ur (Iraq)
4th cent. B.C.	Platon promotes forest restoration on the hills of Attica (Greece)
3rd cent. B.C.	Regulations of the king Ashoka to protect animals (wild and domestic) and forest against fires, first „reserves“ (India)
ca A.D. 1079	William I the Conqueror declares the New Forest a royal hunting ground (England)
12th cent.	First designation of protection forests (Switzerland)
A.D. 1210	Genghis Khan orders the protection of deer, ibex and wild asses (Mongolia)
1289 and 1309	The Holy Roman Emperors Rudolf of Habsburg and Henry (Heinrich) VII issue decrees to protect the imperial forest of Nuremberg (Nürnberger Reichswald) (Germany)
1324	Rheingauer Landrecht – law includes provisions on the protection of small birds in the Rhineland (Germany)
1335	Law of the city of Zurich on the protection of small birds (Switzerland)
1344-5	Orders to decrease the numbers of cattle and goats to protect the forest (Republic of Dubrovnik)

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Beginnings of nature conservation and environmental protection in dates (2)

- 1411 - **Ban to fell trees** in certain places in the Republic of Dubrovnik (Croatia)
- The city council of Cologne upon the Rhine takes a decision on **animal protection** (Germany)
- Decree of the Hungarian king (and Holy Roman Emperor) Sigismund of Luxemburg **on the protection of the Kežmarok/Käsmark forests** in the Tatra Mts (now Slovakia)
- 1423 Decree of the Hungarian king Sigismund of Luxemburg **on the protection of forests and of yew** and on partial **protection of game** (Hungary)
- 1436 Decree of the Hungarian king Sigismund of Luxemburg on the **protection of hunting game** in royal forests (Hungary)
- 1449 Hunting rights in Hungary are regulated to **protect rare birds**
- 1450, 1468, 1475 The Republic of Venice issues regulations to **protect forests** in the Istrian peninsula (now Slovenia and Croatia)
- 1480 The book of Hans Folz on medicinal hot springs is published in Nuremberg promoting the **protection of springs and their surroundings** (Germany)
- 1488 The major Waldmann of the City of Zurich attempts unsuccessfully to push through a law that would **ban the felling of young trees and deforestation** (Switzerland)
- 1504 King Vladislav II **issues a law prohibiting peasants to hunt or catch birds** (Czechia)

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Beginnings of nature conservation and environmental protection in dates (1)

- 1355 Attempt of Charles IV to put through the Majestas Carolina, a law code that includes strict measures to **protect royal forests** (Czechia)
- 1514 Verböczy's law code "Tripartitium" includes also provisions on the **protection of forests** against damage by shepherds etc. (Hungary)
- 1538 King Sigismund I the Old orders that the poaching of a wisent shall be punished by death (Poland)
- 1541 Foundation of a the game reserve (for hunting) in the Białowieża virgin forest (Białowieża, Poland)
- 1542 **Decree to protect chamois and to ban its hunting** in the canton Glarus (Switzerland)
- 1565 Order of the Hungarian king Maximilian to mining towns to issue regulations ensuring the protection of **forests and their wildlife** (Hungary)
- 1569 **Hunting any game** in the canton Glarus shall be punished by imprisonment and a fine of 50 Gulden (Switzerland)
- 1576 Regulation on **forest protection** issued by the City of Hague (Den Haag, the

J. Schlaghamerský: Nature conservation – history of the field

History of Nature Conservation in Dates (1)

- 1807 First use of the term Natural Monument ("**monument de la nature**") (Alexander v. Humboldt, Prussia / France)
- 1832 **First protected areas**: 4 sites with **hot springs** (Arkansas, USA)
- 1835 Law on the **protection of fish spawning sites** in Russia
- 1836 The Prussian government buys part of the Drachenfels hill in the Rhineland to prevent its destruction by a quarry
- 1838 - **Count Georg Franz August von Buquoy(-Longueval) (Bohemia)** instructs his foresters to preserve two virgin forests in the Novohradské Mountains (South Bohemia) , **Žofínský prales (Žofín/Sofia's virgin forest)** and **Hojná voda**, thus making them the oldest protected natural sites in mainland Europe.
- Proclamation of the **protection of a geological site** by the city council of Neuenburg / Neuchâtel (CH)
- 1841 Foundation of the **first scientific reserve**: Gammelmosen near Copenhagen (DK)
- 1846 **An ancient oak tree is protected** in Upper Bavaria (King Ludwig I. of Bavaria)
- 1852 Protection of the **geological site Teufelsmauer** in the Harz Mountains (D)
- 1853 **First nature reserve protected by law**: Fontainebleau forest near Paris (F)
- „réserve artistique“

J. Schlaghamerský: Nature conservation – history of the field

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(Alexander v. Humboldt, Prussia / France)

1832 **First protected areas:** (USA)

1835 Law on the **protection**

1836 The Prussian government in the Rhineland
to prevent its destruction

1838 - **Count Georg Franz** / **foresters to preserve**
Bohemia), **Žofínský**
making them the oldest
- Proclamation of the
Neuenburg / Neauch

1841 Foundation of the **first** near Copenhagen (DK)

1846 **An ancient oak tree is** Ludwig I. of Bavaria)

1852 Protection of the **geolo** mountains (D)

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Alexander von Humboldt

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foto: Libor Sváček



Žofínský prales

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- 1835 Law on the **protection of fish spawning sites** in Russia
- 1836 The Prussian government buys part of the Drachenfels hill in the Rhineland to prevent its destruction by a quarry
- 1838 - **Count Georg Franz August von Buquoy(-Longueval) (Bohemia)** instructs his foresters to preserve two virgin forests in the Novohradské Mountains (South Bohemia) , **Žofínský prales (Žofín/Sofia's virgin forest)** and **Hojná voda**, thus making them the oldest protected natural sites in mainland Europe.
- Proclamation of the **protection of a geological site** by the city council of Neuenburg / Neuchâtel (CH)
- 1841 Foundation of the **first scientific reserve**: Gammelmosen near Copenhagen (DK)
- 1846 **An ancient oak tree is protected** in Upper Bavaria (King Ludwig I. of Bavaria)
- 1852 Protection of the **geological site Teufelsmauer** in the Harz Mountains (D)
- 1853 **First nature reserve protected by law**: Fontainebleau forest near Paris (F)
- „réserve artistique“

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History of Nature Conservation in Dates (1)

1807 First use of the term Natural Monument ("**monument de la nature**")
(Alexander v. Humboldt, Prussia / France)



Teufelsmauer (Harz)

Boubínský prales

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History of Nature Conservation in Dates (2)

- 1859 Publication of the book by F. Douchy "Ochrana stromů" (Protection of Trees) (Czech Lands)
- 1864 Beginning of the protection of Giant Sequoia trees in the USA
- 1870 - Law on the protection of birds (Bohemia)
- First nature reserve in Switzerland: Creux-du-Van (Club jurrasien)
- 1872 Establishment of the first national park in the world: Yellowstone National Park (USA)



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- 1875 Foundation of the Deutscher Verein zum Schutz der Vogelwelt (German Club for the conservation of Birdlife) in Germany
- 1876 Establishment of the desert national park Los Leones in Mexico
- 1876 First draft of a law on forest protection is presented to the congress of the USA
- 1879 Passage on Protection Forests in the Hungarian forest law (Hungary – then incl. Slovakia)
- 1883 Hungarian forest law on the protection of game and songbirds
- 1885 Establishment of the first national park in Canada: Banff Nat. Park (then as Banff Hot Springs Reserve)
- 1886 Establishment of another two national parks in Canada: Yoho, Glacier



Banff National Park

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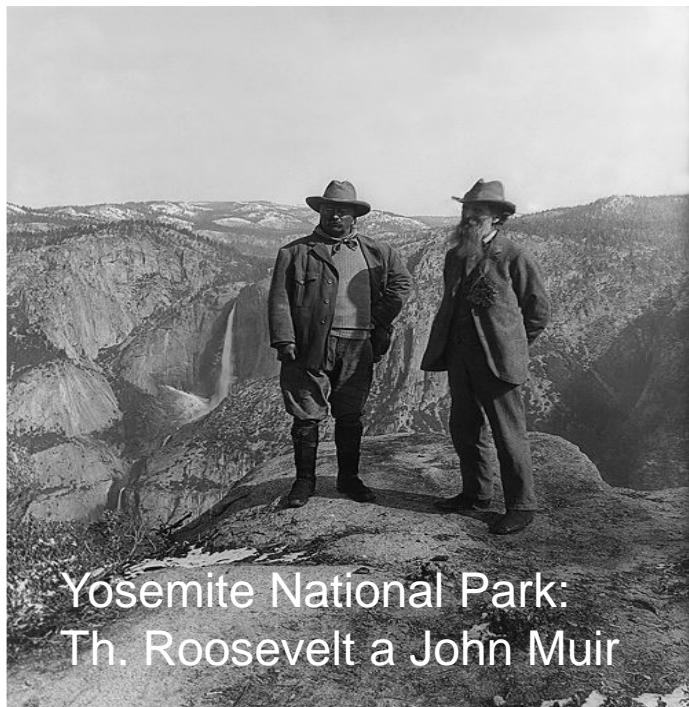
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History of Nature Conservation in Dates (3)

- 1887 In Germany a **law on bird protection is passed**
- 1889 In Great Britain the Royal Society for the **Protection of Birds** is founded
- 1890 Establishment of three national parks in the Sierra Nevada: Yosemite, Sequoia, General Grant National Park (California, USA)
- 1891 - Establishment of Belair National Park in Australia
- The Forest Reserve Act is passed in the USA and two reserves are established in the same year (in Wyoming and Colorado)
- 1894 Establishment of Tongariro Nat. Park, New Zealand (process started 1886/87)
- 1895 - International conference on **bird protection** in Paris
- Foundation of The National Trust for Places of Historic Interest and Natural Beauty in Great Britain
- **Protection of the sites "Panská skála", "Vrkoč" and "Peklo" in northern Bohemia (by the German-speaking "Exkursionsclub")**
- W. Wetekamp, member of Prussian parliament, demands state-organized nature conservation
- 1898 Foundation of the **first reserve in Africa**: Sabie Game Reserve (South Africa)
(first under the name „Government Wildlife Park“, later, after enlargement, the Krüger National Park)

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Vrkoč



Panská skála

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History of Nature Conservation in Dates (4)

- 1899 The Bund für Vogelschutz (Union for Bird Conservation) founded in Germany
(later Deutscher Bund für Vogelschutz, today Naturschutzbund - Nature and Biodiversity Conservation Union)
- 1900 A law regulating trade of **wildlife, fish and plants** (the Lacey Act) passed in the USA
- 1901 - **G. Nowak, member of parliament in Austria proposed to issue a law about care for natural monuments**
- The Société pour la Protection des Paysages (Landscape Protection Society) is founded in France
- 1904 - In Prague the Svaz spolků pro okrašlování a ochranu domoviny (union for protecting our country and making it more beautiful) is founded
- The first reserve in the Giant Mountains (Krkonoše) is established (Strmá stráň or Gehänge in the valley Labský důl) by count Harrach (Bohemia)
- A first regulation aiming at the conservation of the flora of the Giant Mts.
- **First publication of the memorandum "Naturdenkmäler" (a theory of nature conservation and proposal how to organize conservation in Prussia) by Hugo W. Conwentz**
- Bund Heimatschutz (Homeland Conservation Union) founded in Germany
- 1905 The Vereniging tot Behoud van Natuurmonumenten in Nederland founded (Union for the Conservation of Natural Monuments in the Netherlands)
- 1906 **The first state (national) nature conservation authority is founded, i.e. the "Staatliche Stelle für Naturdenkmalpflege" in Prussia**

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History of Nature Conservation in Dates



Hugo Wilhelm Conwentz
1855-1922
Prussia, Germany

Important publications in Nature Conservation:

Die Gefährdung der Naturdenkmäler und Vorschläge zu ihrer Erhaltung. Denkschrift, dem Herrn Minister der geistlichen, Unterrichts- und Medizinal-Angelegenheiten überreicht, Berlin 1904

Merkbuch für Naturdenkmalpflege und verwandte Bestrebungen, Berlin 1918

Since 1906 in charge of the first state (national) authority for nature conservation – *Staatliche Stelle für Naturdenkmalspflege*, since 1910 as its appointed director

1913 Lectures in Prague and Brno

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History of Nature Conservation in Dates (5)

1907 Proclamation of the first nature reserve in northern Germany (the Plagefenn near Chorin)



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History of Nature Conservation in Dates (5)

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- 1908, 1911 A draft outline of a law on the conservation of natural and landscape monuments is presented to the Bohemian provincial parliament by its member Jeřábek (The kingdom of Bohemia is then a province of Austria-Hungary)
- 1909
- Law on the conservation of birds useful in agriculture passed in Moravia (the margravate of Moravia is then a province of Austria-Hungary)
 - Foundation of the Swiss conservation society "Schweizerischer Bund für Naturschutz"
 - In Sweden a law on nature conservation is passed, establishing 9 national parks (the first ones in Europe): Gotska Sandön, Garphyttan, Ängsö, Hamra, Sonfjället, Abisko, Pieljekaise, Stora Sjöfället a Sarek



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- 1910 Foundation of the conservation society "Danmarks Naturfredningsforening" in Denmark
- 1912 Foundation of the Society for the Promotion of Nature Reserves in the UK
- 1913 International conference on Nature Conservation in Berne (CH)
- 1914 Proclamation of the Swiss National Park (the first in the Alpes)
- 1916 Establishment of the National Park Service in the USA
- 1918 In the just established Czechoslovakia the Ministry of Education is made responsible for the care for national heritage (historic) and nature conservation

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History of Nature Conservation in Dates (6)

1922

- R. Maximovič becomes officer for nature conservation within national heritage protection (Ministry of Education, Czechoslovakia)
- Member of parliament J. V. Stejskal submitted the draft of a law on the protection of national monuments in Czechoslovakia



Rudolf Maximovič (1881-1963)

The Czech lands within Austria-Hungary, later Czechoslovakia

History of Nature Conservation in Dates (7)

1922 Proclamation of the Gran Paradiso National Park in Italy



Gran Paradiso

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History of Nature Conservation in Dates (7)

1922 Proclamation of the Gran Paradiso National Park in Italy

1926 Proclamation of Kruger National Park in South Africa

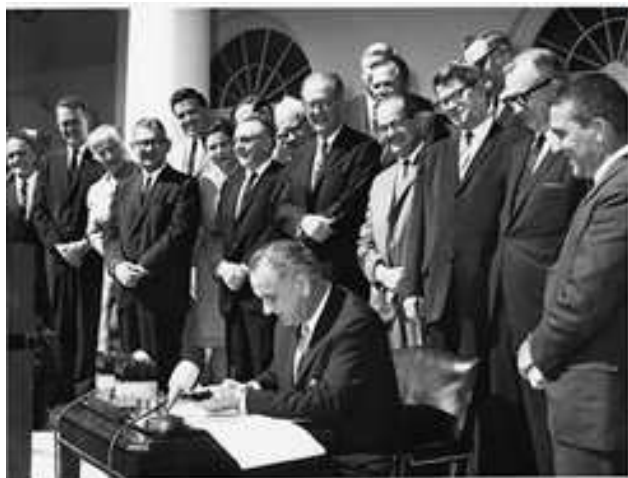


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History of Nature Conservation in dates (7)

- 1922 Proclamation of the Gran Paradiso National Park in Italy
- 1926 Proclamation of Kruger National Park in South Africa
- 1956 First nature conservation law in Czechoslovakia (40/1956 Col.)
- 1964 The Wilderness Act passed by Congress, signed by the president of the USA

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.”



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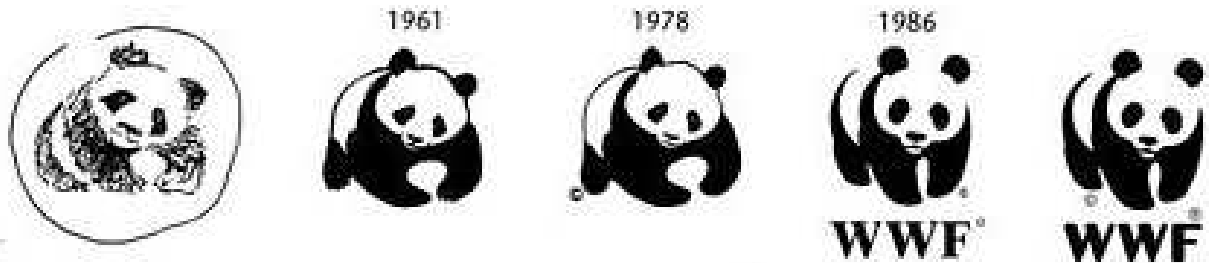
The beginning of international nature conservation in dates (1)

- 1902 Convention for the protection of birds useful to agriculture (12 countries signed)
- 1913 International conference on conservation in Berne (CH): Founding of the „Consultative Commission for the International Protection of Nature" by Paul Sarasin from Basel (CH).
- 1923 International conference on conservation in Paris (F)
- 1930 The American Committee for International Wild Life Protection founded (USA)
- 1931 International conference on conservation in Paris (F)
- 1934 The Internat.Office for the Conservation of Nature founded, seat: Basel (CH)
- 1946 International conference on conservation in Basel (CH)
- 1947 International conference on conservation in Brunnen (CH)
- 1948 International conference on conservation in Fontainebleau near Paris (F): founding of the **International Union for the Protection of Nature** (UIPN / IUPN) under the UNESCO, seat: Gland, CH.

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The beginning of international nature conservation in dates (2)

- 1955 international conference of nature conservation (Edinburgh, UK):
name IUPN changed to UICN / IUCN
- Union internationale pour la Conservation de la Nature et de ses Ressources
 - International Union for the Conservation of Nature and Natural Resources
- acted from 1990 to March 2008 under the name "The World Conservation Union – IUCN“
- 1961 Manifest of Morges: foundation of the **World Wildlife Fund**, seat: Morges, CH
- as of 1979 Gland, CH.
- 1986 The World Wildlife Fund renamed to **World Wide Fund for Nature** (WWF)
(keeping its old name in the USA and Canada)



Development of the WWF logo from the sketch by Gerald Waterson and the first official version by Sir Peter Scott until its present form

Building of the IUCN in Gland, Switzerland