Ecological Values of Europe's Wilderness

Mark Fisher November 2013
Wildland Research Institute

Divergent paths for wild land in the 19th and 20th century – the Continental divide

19th century America – aesthetic approach

- wild land viewed as a source of **inspiration** and **recreational activity**
- a **spiritual, aesthetic** and **intrinsic beauty**
- species and **natural systems** had an **inherent value**, not created or dependent on human beings

20th century Europe – scientific approach

- **scientific approach** to **restoration** and the **preservation** of unique assemblages of species
- not necessarily based on landscape values

A painterly perception of wild scenes bridged the Continents - from Yosemite Valley to the Bernese Oberland in Switzerland

The “discovery” of Yosemite valley, 1851

Mariposa Indian Encampment, Yosemite Valley 1872 – Alfred Bierstadt

Stereo-view card titled "Indian Camp“ Watkins Studio

Dr Lafayette Bunnell

- groups of **Miwok** and **Paiute** settled in Yosemite between 4,000 and 8,000 years ago
- Ahwahnechee lived off **deer** and ground **acorn meal** from black oak
- annually **burned valley floor vegetation**, which selected for black oak and kept meadows and forests open
- volunteers of the Mariposa Battalion entered Yosemite Valley **25 March, 1851**, in search of native tribal leaders involved in raids on Euro-American settlements
- Lafayette Bunnell, battalion physician, writes about the **Indian war** that led to the **“discovery”**
- after the “Mariposa Wars”, Awahneechee had a long if **troubled relationship** with Yosemite Valley

Carleton Watkins & the photographic age of exploration

Watkins, summer of 1861, strapped a tonne of camera equipment to mules and rode into Yosemite Valley and Mariposa Grove

The three brothers

The half dome

The vernal fall

Mirror Lake and Mount Watkins

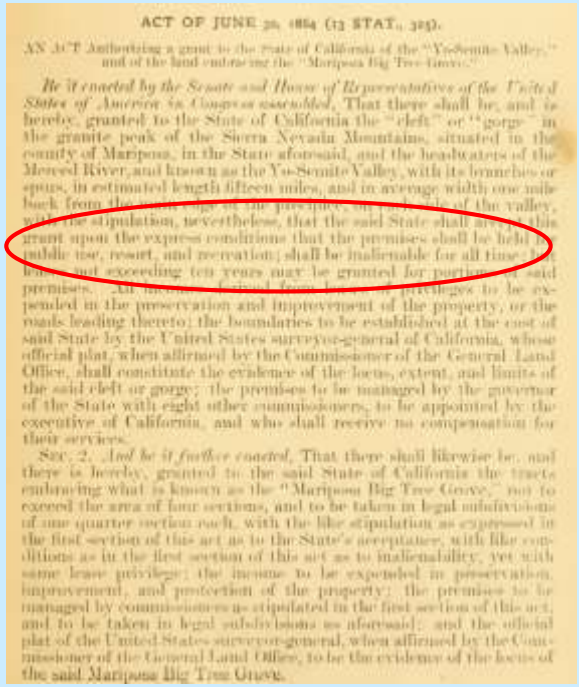
Grizzly Giant sequoia tree

View down the valley from Union point

Grant of "Yo –Semite Valley" to the State of California 1864

Galen Clark in front of the Grizzly Giant Tree, Mariposa Grove

- Galen Clark finds **giant sequoia trees** in Mariposa Grove, 1857
- determines to preserve Mariposa Grove and Yosemite from **logging**
- drafts Bill with support from U.S. Senator John Conness
- submits Bill to Congress along with **Carleton Watkins photographs**



ACT OF JUNE 30, 1864 (13 STAT., 325).

AN ACT Authorizing a grant to the State of California of the "Yo-Semite Valley," and of the land embracing the "Mariposa Big Tree Grove."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be, and is hereby, granted to the State of California the "cleft" or "gorge" in the granite peak of the Sierra Nevada Mountains, situated in the county of Mariposa, in the State aforesaid, and the headwaters of the Merced River, and known as the Yo-Semite Valley, with its branches or spurs, in estimated length fifteen miles, and in average width one mile back from the main cliffs of the precipitous walls on each side of the valley, with the stipulation, nevertheless, that the said State shall accept this grant upon the express conditions that the premises shall be held for public use, resort, and recreation; shall be inalienable for all time; and leases not exceeding ten years may be granted for portions of said premises, with such restrictions and privileges to be expended in the preservation and improvement of the property, or the roads leading thereto; the boundaries to be established at the cost of said State by the United States surveyor-general of California, whose official plat, when affirmed by the Commissioner of the General Land Office, shall constitute the evidence of the locus, extent, and limits of the said cleft or gorge; the premises to be managed by the governor of the State with eight other commissioners, to be appointed by the executive of California, and who shall receive no compensation for their services.

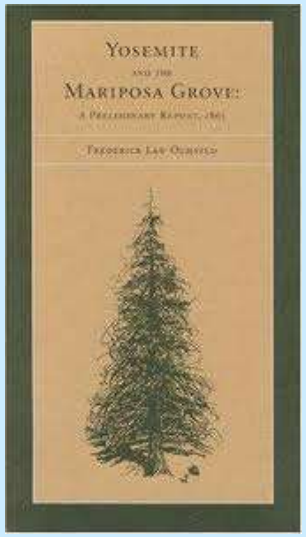
SEC. 2. *And be it further enacted*, That there shall likewise be, and there is hereby, granted to the said State of California the tracts embracing what is known as the "Mariposa Big Tree Grove," not to exceed the area of four sections, and to be taken in legal subdivisions of one quarter section each, with the like stipulation as expressed in the first section of this act as to the State's acceptance, with like conditions as in the first section of this act as to inalienability, yet with same lease privileges; the income to be expended in preservation, improvement, and protection of the property; the premises to be managed by commissioners as stipulated in the first section of this act, and to be taken in legal subdivisions as aforesaid; and the official plat of the United States surveyor-general, when affirmed by the Commissioner of the General Land Office, to be the evidence of the locus of the said Mariposa Big Tree Grove.

The Yosemite Valley and Mariposa Big Tree Grove were granted:

"upon the express conditions that the premises shall be held for public use, resort, and recreation; and shall be inalienable for all time"

The uniqueness of the legislative grant is that it provided for land to be **reserved for non-utilitarian purposes**

The legislation required the State Governor with **eight other appointed Commissioners** to manage the grant of the Yosemite Valley



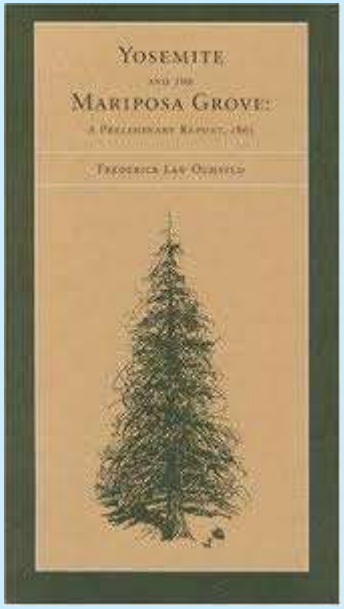
The aesthetics of the natural scene

Frederick Law Olmsted wrote a **Preliminary Report on Yosemite** in 1865 that has a systematic exposition of the **geomorphology, hydrology** and **biophysical qualities** of the valley, as well as:

- the importance of **contact with wilderness for human well-being**
- the **effect of beautiful scenery on human perception**

Frederick Law Olmsted, John Singer Sargent 1895

A democratisation of wild nature



Yosemite and the Mariposa Grove: A Preliminary Report, 1865, Frederick Olmstead Law

Olmsted realised how easily **a few men could destroy** the valley for their own material gain. He argued that portions of natural scenery be **properly guarded and cared** for by the government:

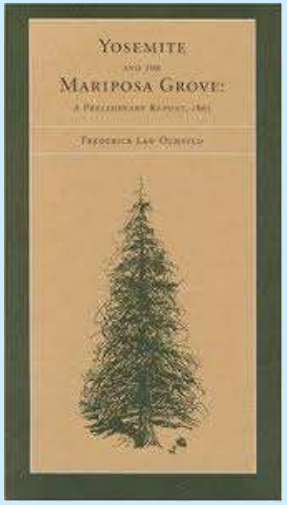
"for the free use of the whole body of the people forever …..laws to prevent an unjust use by individuals of that which is not individual but public property, must be made and rigidly enforced"

Burning of the valley by the Ahwahnechee came in for criticism:

"Indians and others have set fire to the forests and herbage and numbers of trees have been killed by these fires……rocks in the midst of the most picturesque natural scenery have been broken, painted and discolored by fires built against them"

"that which is not individual but public property"

A European connection to the Swiss Alps



Olmstead refers to the works of Swiss painter **Alexandre Calame** while describing the **impressive character of the Sierra Nevada mountains**

"It is not, however, in its grandeur or in its **forest beauty** that the attraction of this intermediate region consists, so much as in the more **secluded charms** of some of its glens formed by **mountain torrents** fed from the snow banks of the higher Sierras. These have worn **deep and picturesque channels** in the **granite rocks**, and in the moist shadows of their recesses grow **tender plants of rare and peculiar loveliness**. The broad parachute-like leaves of the peltate saxifrage, delicate ferns, soft mosses, and the most brilliant lichens abound, and in following up the ravines, **cabinet pictures open at every turn**, which, while composed of materials mainly new to the artist, constantly recall the most **valued sketches of Calame** in the **Alps** and Apennines"

Switzerland - forests, rocks , torrents

Mountain Torrent before a Storm (The Aare River, Haslital) (1850)

Torrent in the Alps (1849)

The Bernese Oberland
- forces of nature strongly acting within the landscape, as Olmsted observed in the **Yosemite Valley**

Mountain Torrent (1850-60)

Alexandre Calame (1810-1864)

From the collection of Asbjørn Lunde

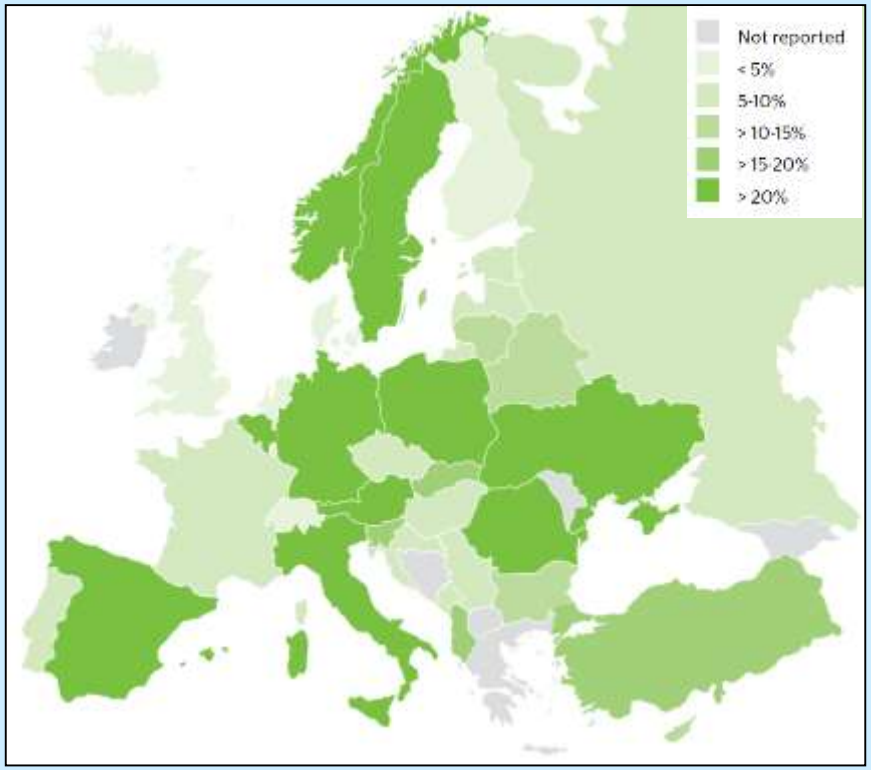
Forests are the history of protected nature in Europe

Switzerland - forestry regulated by the communes as *"rights of usage"*
- communes in mountainous regions issued ***"banning letters"*** (*Bannbriefe*) to preserve forests that protected against avalanches, rockfalls and torrents eg. Andermatt banning letter 1397
- suffers a series of **disastrous landslides and floods in the 1830s**, leading several cantons to pass forestry laws between 1834 and 1840 that prohibited clear-cutting

Romania - official measures in 14th century restricting access and use to **forest reserves** (*branisti*) through ***"letter of the forbidden forest"*** (*carti de paduri oprite*). No hunting, fishing, felling, grazing, foraging

Austria - wood cutting and litter harvest prohibited to avoid **avalanches and gully erosion** on steep slopes above villages of Oberinntal, Tyrol in 1517, Möllta, Carinthia, in 1518

Protection forests across Europe – a stabilising factor against natural hazards



% of forest as protection forest in 2010

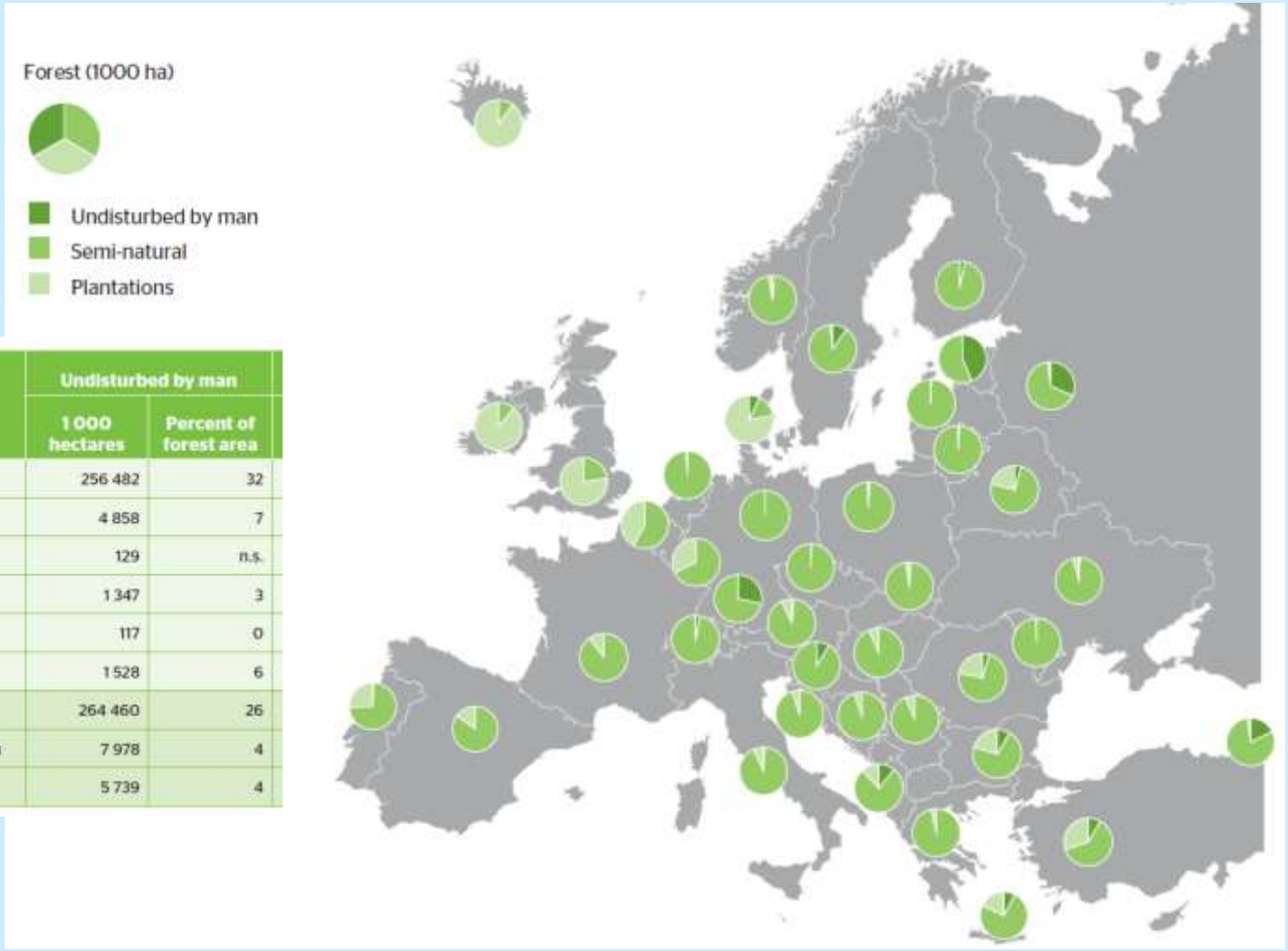
Albania	168
Austria	820
Belarus	1257
Belgium	185
Bulgaria	520
Croatia	133
Cyprus	0
Czech Rep.	256
Denmark	0
Estonia	121
Finland	549
France	1238
Georgia	2960
Germany	4616
Iceland	5
Italy	9015
Hungary	166
Liechtenstein	3
Luxembourg	1
Montenegro	66
Netherlands	0
Norway	4821
Poland	1950
Portugal	241
Romania	2197
Russia	74948
Serbia	179
Slovakia	353
Slovenia	249
Spain	6646
Sweden	6338
Switzerland	22
Turkey	1787
UK	0
Ukraine	2417

Area of protection forest (1,000ha) 2010

Protective functions for soil, water and other ecosystem services:

- **mountainous areas:** risks from active erosion, landslides, torrents or snow avalanche
- **coastal areas**: ingress of water and sand
- **urban areas:** water and air quality

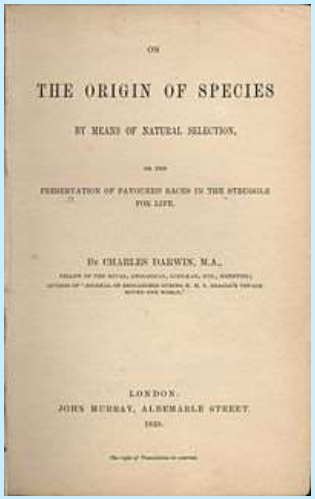
Undisturbed forest as a metaphor for wilderness in Europe



Region	Undisturbed by man	
	1 000 hectares	Percent of forest area
Russian Federation	256 482	32
North Europe	4 858	7
Central-West Europe	129	n.s.
Central-East Europe	1 347	3
South-West Europe	117	0
South-East Europe	1 528	6
Europe	264 460	26
Europe without the Russian Federation	7 978	4
EU-27	5 739	4

Indicator 4.3 Naturalness: Area of forest and other wooded land, classified by **"undisturbed by man"**

The scientific wilderness - Ecological concepts defined in Europe


ON

THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE FOR LIFE.

By CHARLES DARWIN, M.A.,

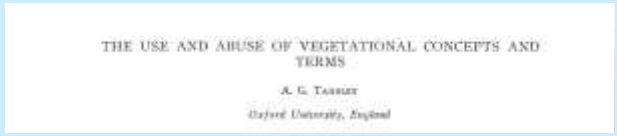
LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1859.


ANIMAL ECOLOGY

BY

CHARLES ELTON

NEW YORK
THE MACMILLAN COMPANY


THE USE AND ABUSE OF VEGETATIONAL CONCEPTS AND TERMS

A. G. TANSLEY

Oxford University, England

- **"the physiology of the earth"**- Hutton 1788
- **phyto-geography** - Alexander Humboldt 1805
- **"struggles for existence ….with the physical conditions of life"** Charles Darwin, The Origin of Species 1859
- **ecology** - Ernst Haeckel 1866
- **biocenosis** - Karl Möbius 1877
- **phytosociology** - Józef Paczoski 1896
- **autecology**, s**ynecology** - Schröter & Kirchner 1902
- **modeling trophic levels of carnivore, herbivore and plants** - Volterra 1925, 1927
- **food chains** (trophic position) - Charles Elton 1927
- **ecosystem** - Arthur Tansley 1935

The emergence of the protected area in Europe

Lagodehki State Nature Reserve, Georgia

Ludwig Mlokosiewicz 1831-1909 Corresponding Member of the Russian Imperial Academy of Sciences

1903 - **Mlokosiewicz** proposed the idea of transforming the Lagodekhi Gorge in to a Nature Reserve

1911 - scientists presented the report **"Lagodekhi Gorge as Monument of Nature and the Necessity of its Protection"** at a meeting of the Caucasian Department of the Russian Geographic Society

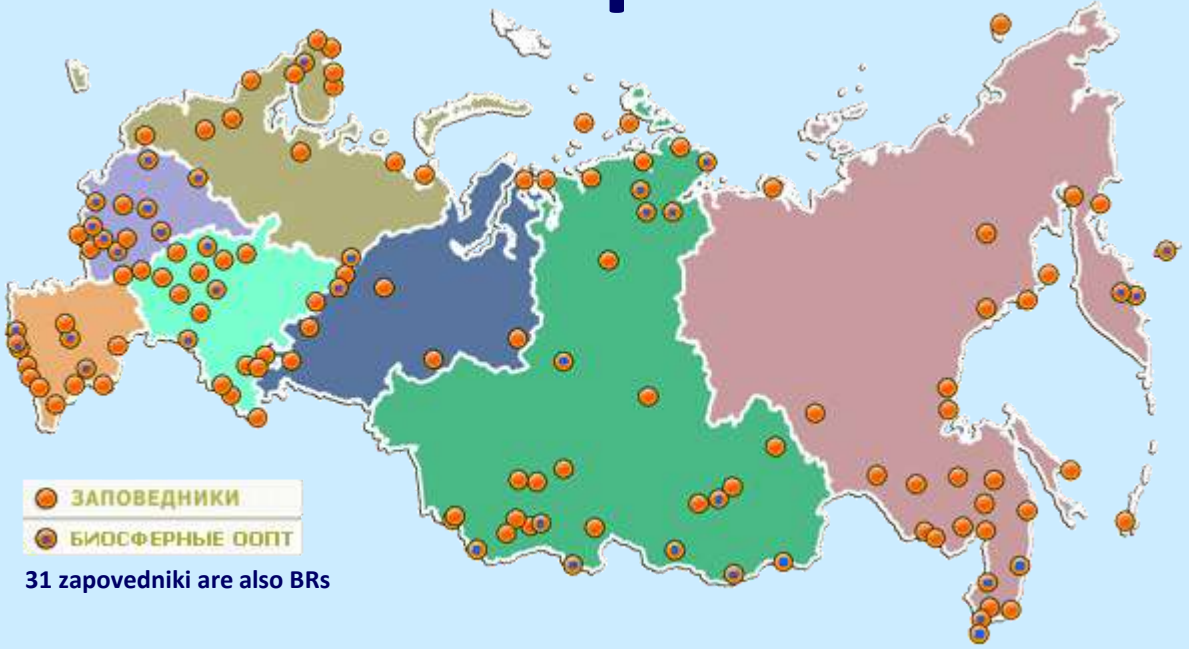
1912 - petition drawn up by the Geographic Society and the Academy of Science. **Lagodekhi Gorge declared a nature reserve.** Tree felling, hunting and livestock grazing were **banned on the reserve**

Waterfall in Shromi Gorge

Gentiana lagodechiana

The emergence of the protected area in Europe

Russia and the Zapovedniki 1916

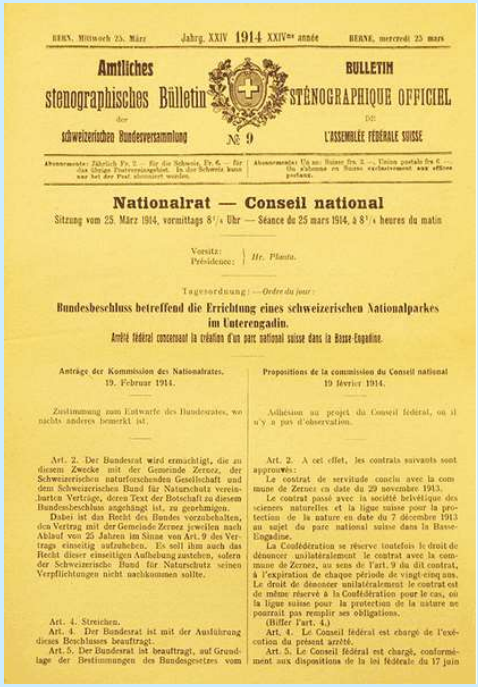


31 zapovedniki are also BRs

- withdrawn from economic use
- standards or models of nature
- the “control” or reference areas in an experiment on the effect of humans upon the natural environment

Swiss National Park (IUCN Cat. Ia)

- 100 years of exclusion from human impact



BERN, Mittwoch 25. März Jahrg. XXIV 1914 XXIVme année BERNE, mercredi 25 mars

Amtliches stenographisches Bulletin der schweizerischen Bundesversammlung

BULLETIN STÉNOGRAPHIQUE OFFICIEL DE L'ASSEMBLÉE FÉDÉRALE SUISSE

№ 9

Nationalrat — Conseil national

Sitzung vom 25. März 1914, vormittags 8¼ Uhr — Séance du 25 mars 1914, à 8¼ heures du matin

Vorsitz: Präsident: Hr. Planta.

Tagesordnung: — Ordre du jour:

Bundesbeschluss betreffend die Errichtung eines schweizerischen Nationalparkes im Unterengadin.

Arrêté fédéral concernant la création d'un parc national suisse dans la Basse-Engadine.

Anträge der Kommission des Nationalrates. 19. Februar 1914.

Propositions de la commission du Conseil national 19 février 1914.

Zustimmung zum Entwurfe des Bundesrates, wo nichts anderes bemerkt ist.

Adhésion au projet du Conseil fédéral, où il n'y a pas d'observation.

Art. 2. Der Bundesrat wird ermächtigt, die zu diesem Zwecke mit der Gemeinde Zernez, der Schweizerischen naturforschenden Gesellschaft und dem Schweizerischen Bund für Naturschutz vereinbarten Verträge, deren Text der Botschaft zu diesem Bundesbeschluss angehängt ist, zu genehmigen.

Dabei ist das Recht des Bundes vorzubehalten, den Vertrag mit der Gemeinde Zernez jeweilen nach Ablauf von 25 Jahren im Sinne von Art. 9 des Vertrags einseitig aufzuheben. Es soll ihm auch das Recht dieser einseitigen Aufhebung zustehen, sofern der Schweizerische Bund für Naturschutz seinen Verpflichtungen nicht nachkommen sollte.

Art. 4. Streichen.

Art. 4. Der Bundesrat ist mit der Ausführung dieses Beschlusses beauftragt.

Art. 5. Der Bundesrat ist beauftragt, auf Grundlage der Bestimmungen des Bundesgesetzes vom

Art. 2. A cet effet, les contrats suivants sont approuvés:

Le contrat de servitude conclu avec la commune de Zernez en date du 29 novembre 1913.

Le contrat passé avec la société helvétique des sciences naturelles et la ligue suisse pour la protection de la nature en date du 7 décembre 1913 au sujet du parc national suisse dans la Basse-Engadine.

La Confédération se réserve toutefois le droit de dénoncer unilatéralement le contrat avec la commune de Zernez, au sens de l'art. 9 du dit contrat, à l'expiration de chaque période de vingt-cinq ans. Le droit de dénoncer unilatéralement le contrat est de même réservé à la Confédération pour le cas, où la ligue suisse pour la protection de la nature ne pourrait pas remplir ses obligations.

(Biffer l'art. 4.)

Art. 4. Le Conseil fédéral est chargé de l'exécution du présent arrêté.

Art. 5. Le Conseil fédéral est chargé, conformément aux dispositions de la loi fédérale du 17 juin

"a sanctuary for animals and plants, as far as possible excluded from any human impact, an area in which for 100 years there would be no economic use from forestry, grazing and hunting, and where no axe, nor the sound of shooting would be heard…..

….the hope that animal species extinct in historical times in our country, will migrate back into the total sanctuary"

Dr Walter Bissegger, National Council March 1914

A Swiss National Park is established in which the entire animal and plant life is left to free and natural development, and is protected from any human influence. The whole Park is placed under scientific observation

Federal Decree on the establishment of a Swiss National Park in the Lower Engadine April 1914

A great experiment in wilderness creation

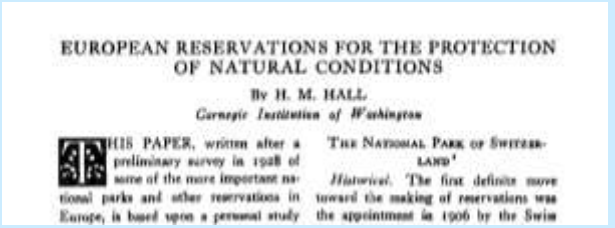
A great "naturalising trial" will be conducted there. To follow all the stages of this naturalising, this return to the original condition, this "retrograde succession" to the most in depth, is a principal object of scientific observation and must extend naturally to a very long period

Prof. Carl Schröter , 1920

Protection of Natural Conditions

- the original paradigm in Europe

American botanist Harvey Hall studied the flora of Yosemite. He travelled Europe in 1928 to learn about National Parks and reserves here. His observations hold true today:



EUROPEAN RESERVATIONS FOR THE PROTECTION OF NATURAL CONDITIONS

By H. M. HALL,
Carnegie Institution of Washington

THIS PAPER, written after a preliminary survey in 1928 of some of the more important national parks and other reservations in Europe, is based upon a personal study

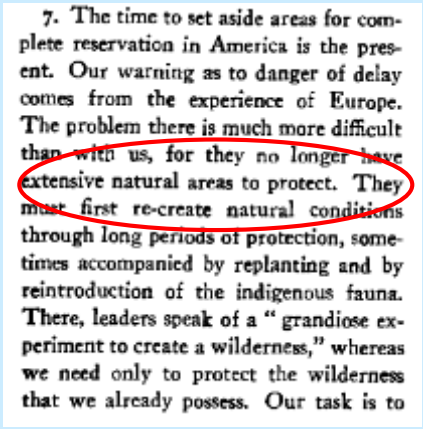
THE NATIONAL PARK OF SWITZERLAND

Historical. The first definite move toward the making of reservations was the appointment in 1906 by the Swiss

Journal of Forestry 27 (1929) 667-684

-Europe was taking a **scientific approach** to setting up Parks, in contrast to **aesthetic and recreational values** in America

-Europe **"no longer had extensive natural areas to protect"**



7. The time to set aside areas for complete reservation in America is the present. Our warning as to danger of delay comes from the experience of Europe. The problem there is much more difficult than with us, for they no longer have extensive natural areas to protect. They must first re-create natural conditions through long periods of protection, sometimes accompanied by replanting and by reintroduction of the indigenous fauna. There, leaders speak of a "grandiose experiment to create a wilderness," whereas we need only to protect the wilderness that we already possess. Our task is to

"They must first re-create natural conditions through long periods of protection"

a freeing of natural processes

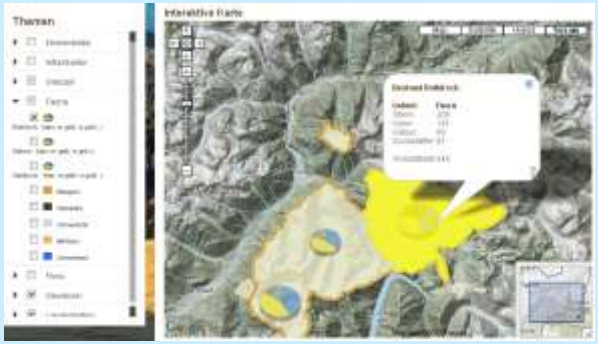
Gran Paradiso National Park - grazing considered to be the **"worst enemy"** of the Park

Abruzzi National Park - partial reserve lower zone "**now denuded and nearly barren**" **"complete reserve"** upper zone had agriculture, grazing, felling, hunting, fishing prohibited

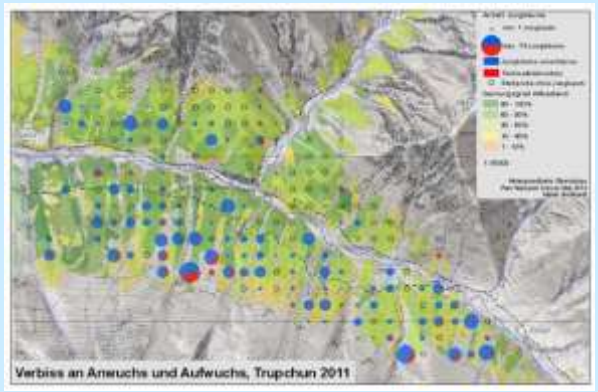
Tatra Mountains, Czechoslovakia, proposed National Park - **Complete reserve** fully protected with buffer area of less severe restrictions

Secondary wilderness is the reality of contemporary wilderness in Europe, and is the outcome from a period of ecological restoration under strict protection

A lack of natural control mechanisms in SNP – trophic cascades



Species counts – Red deer



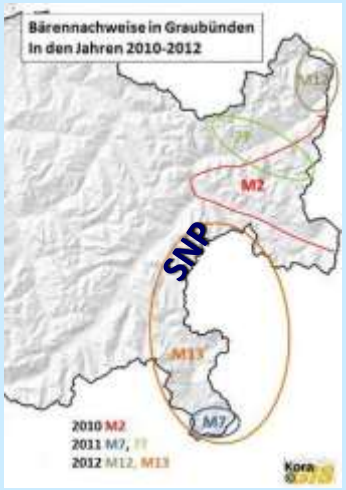
	Red deer	chamois	ibex
1918	12	1,000	60
1925	90	1,250	190
2013	1,818	1,388	257

-alpine meadows **overgrazed** by Red deer, field mice numbers down, less prey for foxes and raptors
-forest regeneration in valleys setback by herbivores

Wildlife comeback (hoped for!)

"Yet one thing is certain: The wolf finds in Switzerland a richly laid table: In recent centuries, the number of red deer was hardly ever as high as today" – SNP 2009

Wolf living in Pigniu, Surselva – 40km from SNP



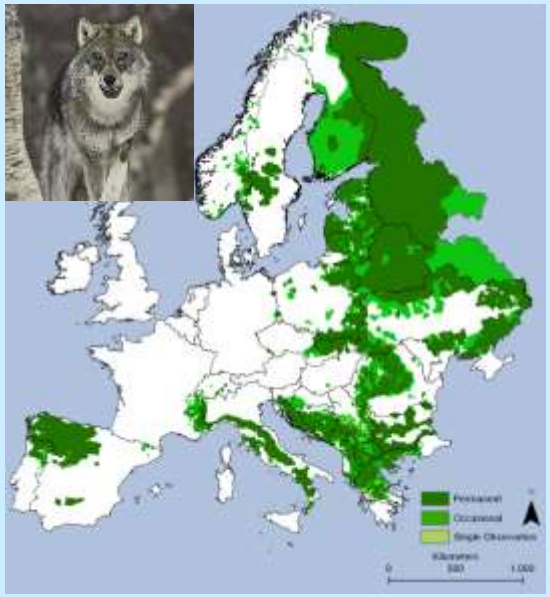
Single migrants living 2010-12

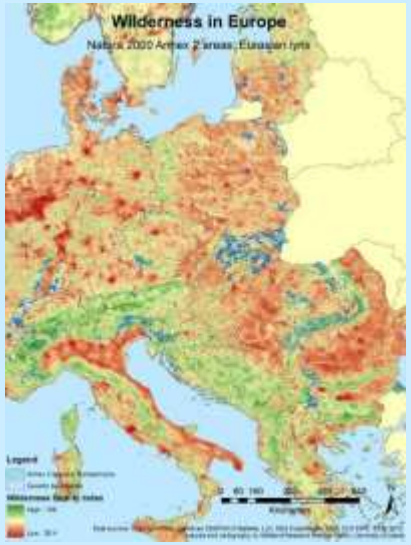
First bear in SNP for 100 years – photo 28 July 2005

25th February 2008: lynx in SNP captured and fitted with a transmitter. Walked into Italy.

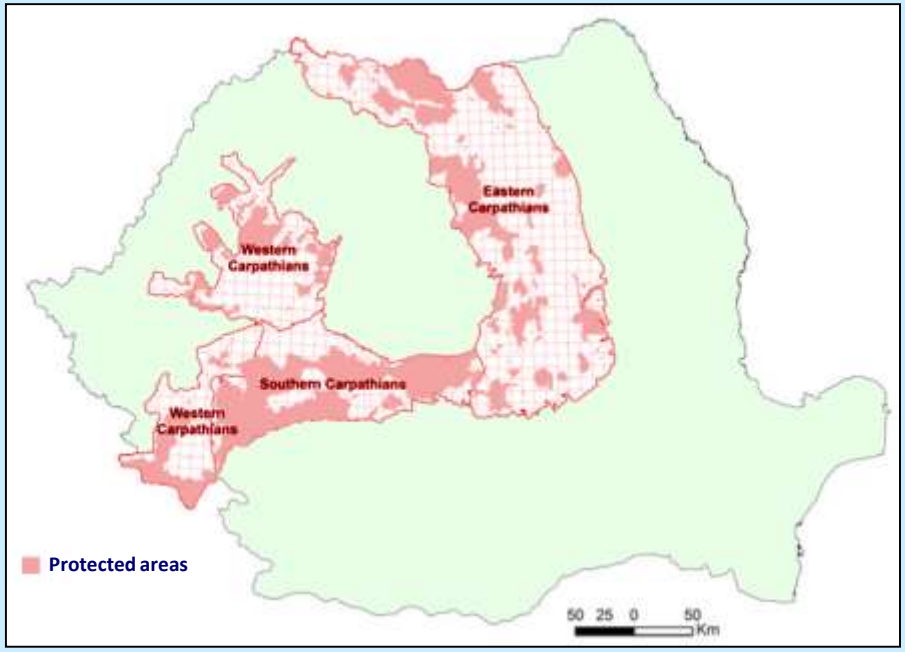
"There will be no organised re-introduction of the bear, lynx or wolf in the National Park. Any individuals of these species that migrate into the Park will be most welcome and will be afforded total protection within the Park's boundaries" - SNP

System directing mammalian species and their contemporary distribution in Europe

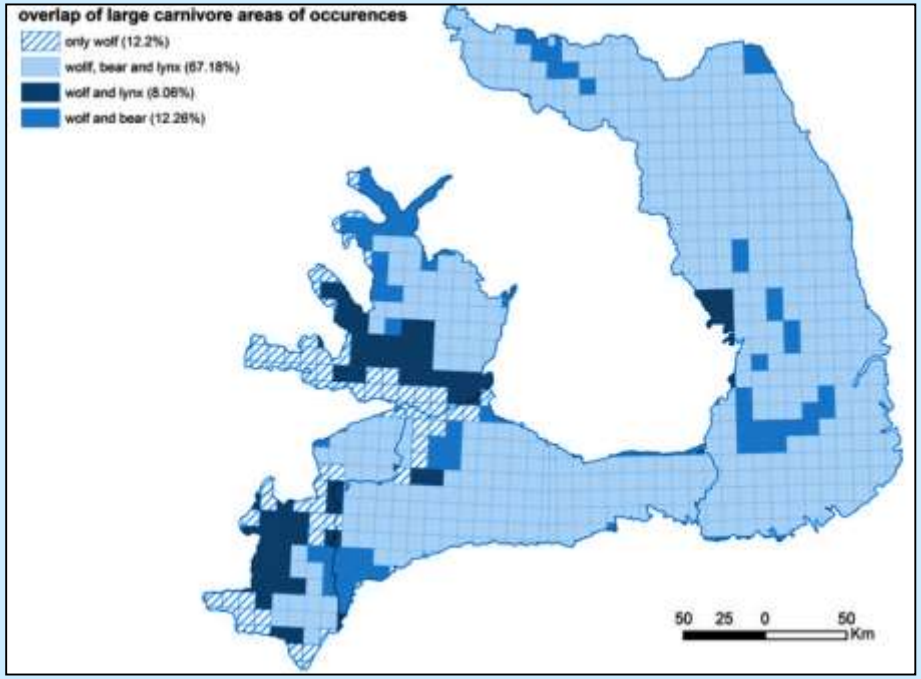


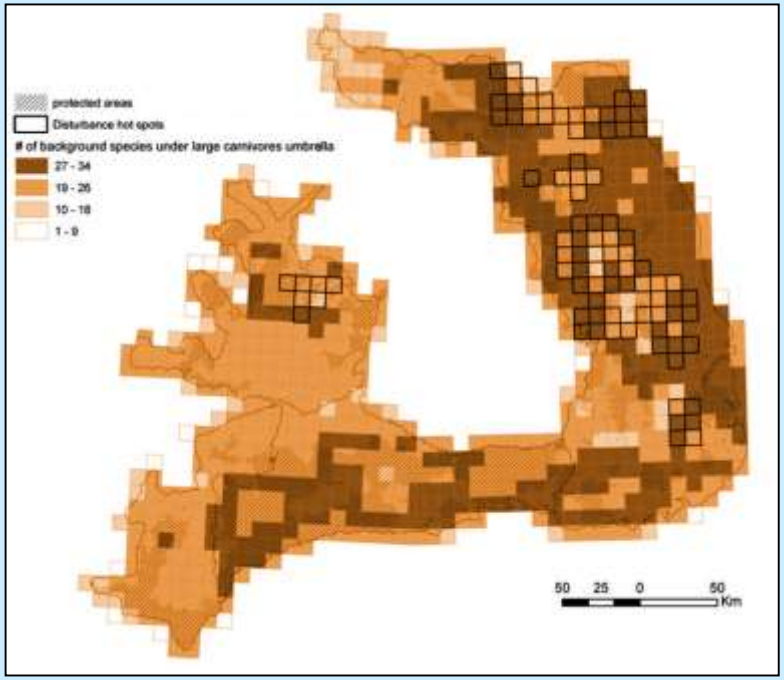


The potential of large carnivores as conservation surrogates in the Romanian Carpathians - Rozylowicz and others 2011

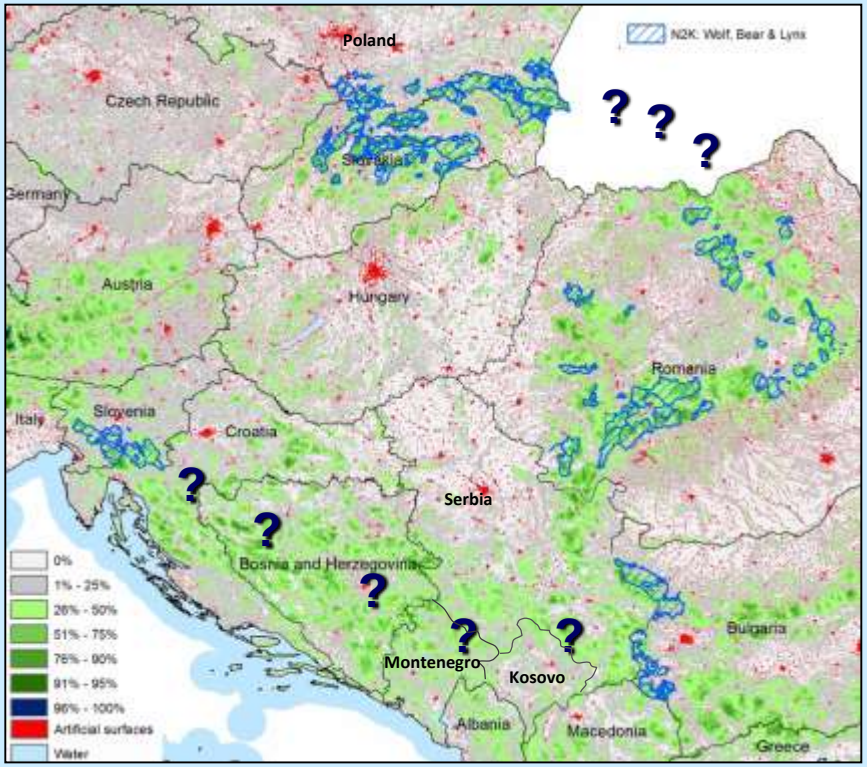


Co-location between **carnivores** and **10 mammal and 55 bird species** of European conservation concern - **forest specialists, habitat generalists, and non-forest species**





Co-location of system directing species
Wolf, lynx and bear in the Carpathian and Dinaric mountains



WRi WILDLAND RESEARCH INSTITUTE

European wilderness continuum map - N2000 sites lynx + bear + wolf

PAN Park's European Wilderness Preservation System



Trophic cascades in place

– the natural condition, the original paradigm, the true wilderness

The last ecologically intact areas in Europe?

Co-location of strictly protected areas with high WQI - top 5% WQI and IUCN Cat. Ia&b II

WQI is a continuum based on an equal weighted combination of population density, road density, distance from nearest road, naturalness of land cover and ruggedness

Chernobyl 27 years on

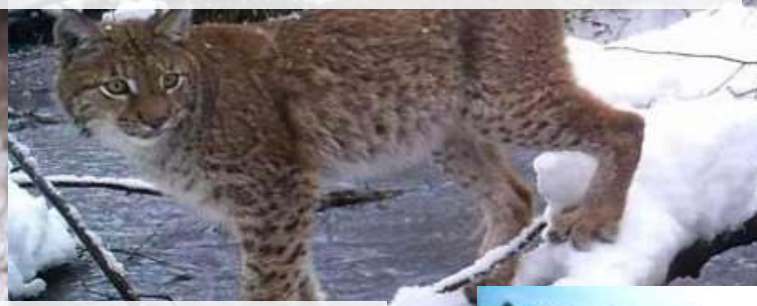
vegetat

In pictures: Chernobyl wilderness



Wildlife comeback - unplanned freeing of natural processes





Trophic cascades in Chernobyl

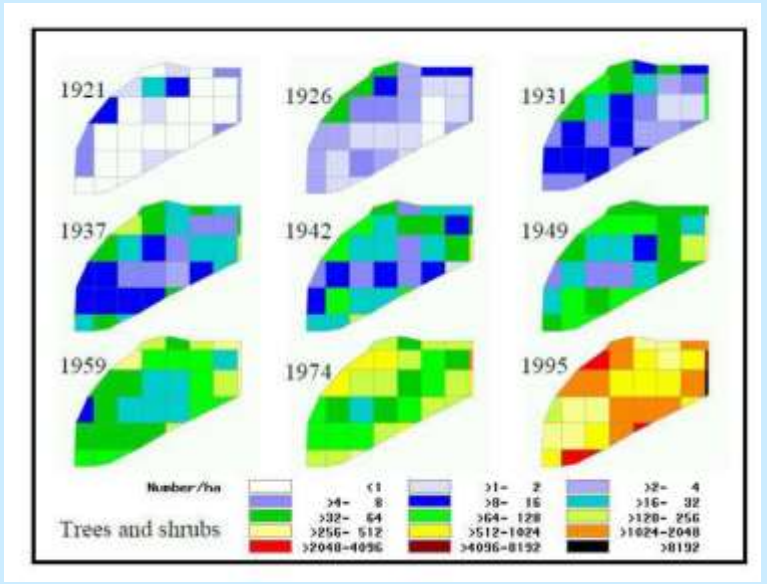



Restoring wilderness from an ecological perspective

Retaining the *"natural condition"* at Nørholm Hede, Denmark

Restoration of vegetation:

-grazing stopped in 1895
-350ha designated a nature reserve in 1913
-owner requested that it be kept it in its *"natural condition"* . No human intervention since
-fixed plots set up in 1921 to study vegetation changes and forest succession
-tree numbers increasing exponentially, with a doubling time of about 10 years
-IUCN Cat. Ib



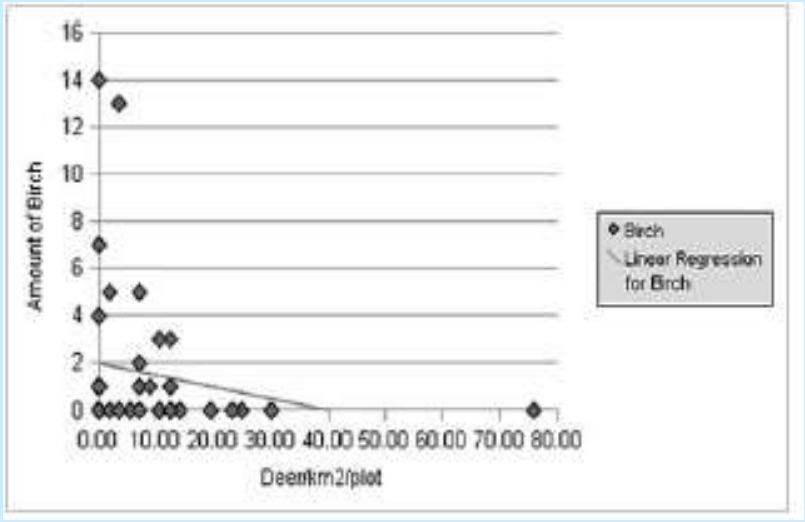
forest succession 1921-1995

Deer return to Nørholm Hede

- deer rarely seen on open heathland of a century ago (1 roe deer in 1900)
- both Red and roe deer migtated into Nørholm Hede as woodland re-colonisation progressed
- 130 roe deer and 35 red deer observed in 2005
- study in 2010 to analyze the relationship between the number of deer and young tree saplings
- deer/Km2 calculated from presence of deer tracks and deer pellets

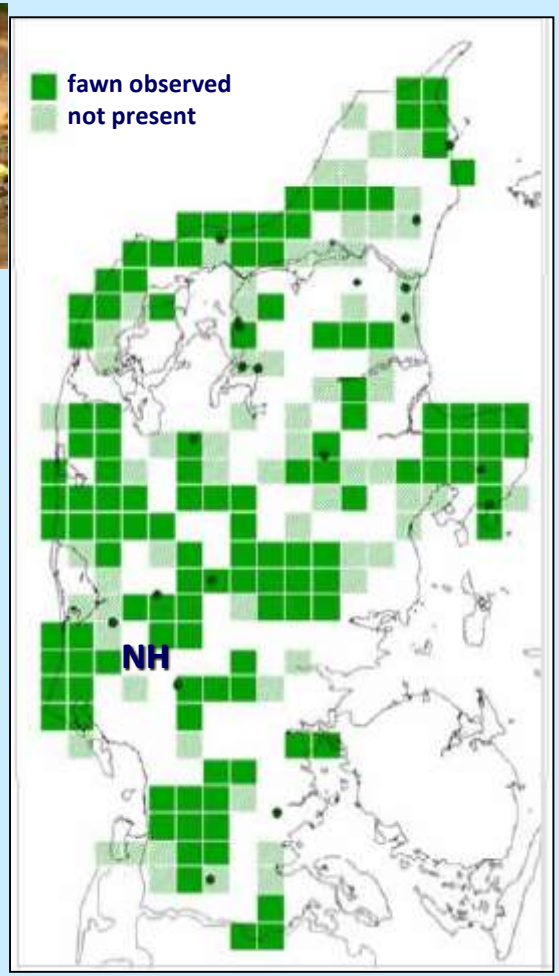
Inverse relation between amount of pellets found and trees <0.5m high

Where are the wolves?

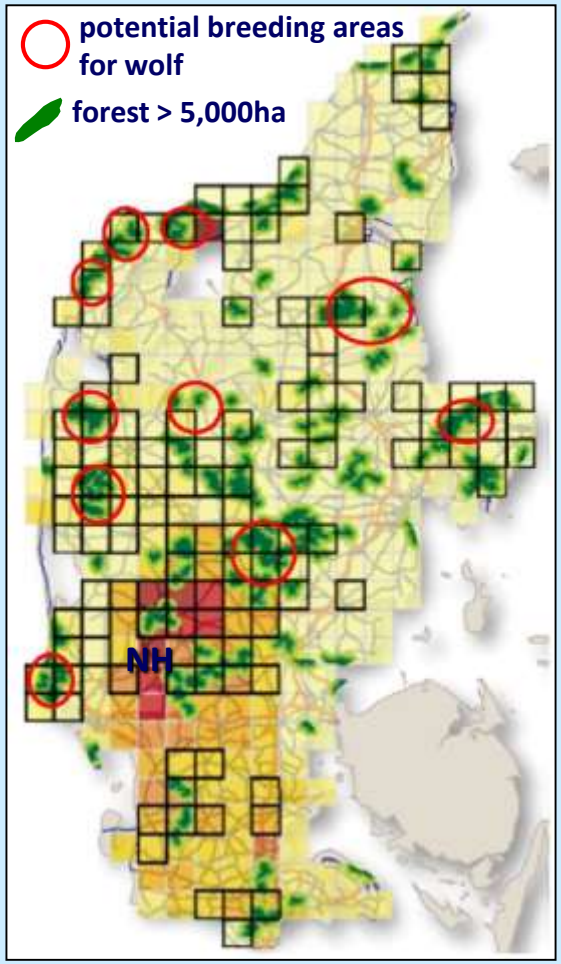


Potential wolf breeding areas in Denmark in 2020

Wolf sightings 2007-2013



Red deer fawn occurrence 1995-2003



Wolves in Denmark - what can we expect? Feb 2013

AARHUS UNIVERSITY

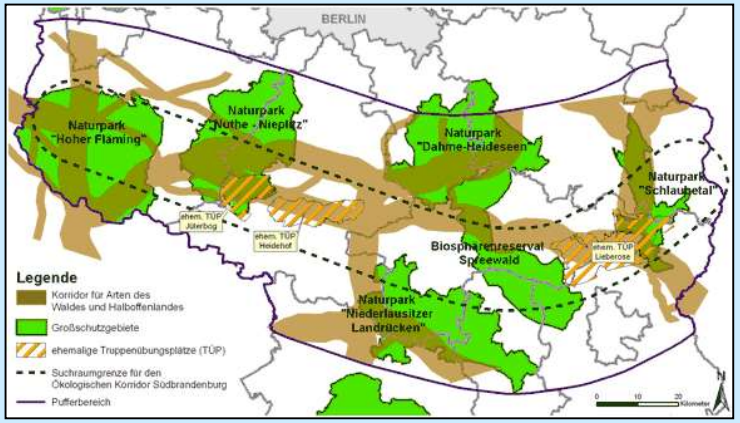
Natural processes observed at large scale

Future wilderness in Brandenburg, Germany

Wildlife comeback planned at large scale

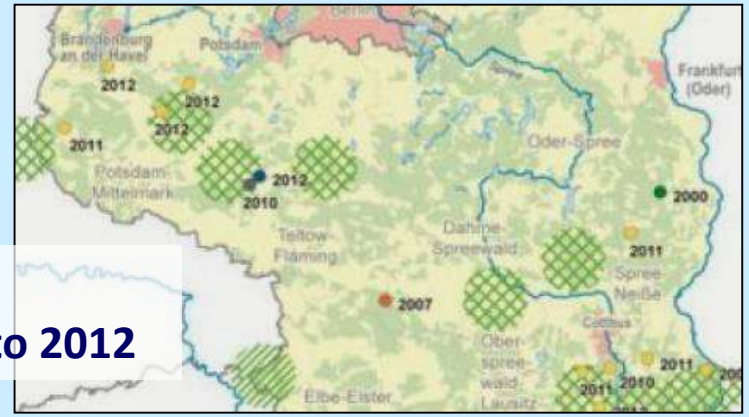
Stiftung Naturlandschaften Brandenburg
Die Wildnisstiftung

- three ex-military training areas strictly protected from 2000
- natural dynamics through non-intervention coupled with monitoring successional changes, other plants and animals
- new wilderness seen as core areas in an ecological corridor that stretches to border with Poland
- 12.7Km2 added to Germany's target of 2% wilderness by 2020



Ökologischer Korridor Südbrandenburg

Wolf management plan, Brandenburg 2013-2017



Wolf packs in Brandenburg to 2012

Wolves caught in a camera trap in Lieberose 2010 – **at least 3 wolf cubs born since then**

Wolf sub-populations and the expansion into NW Europe

-wolf population about 20,000

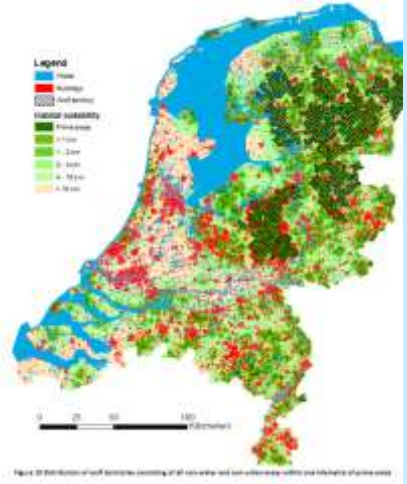
-10 subpopulations with constraints on mixing (Spain, Scandinavia most isolated)

- **German- West Poland** group probably from the Baltic group, not Carpathian

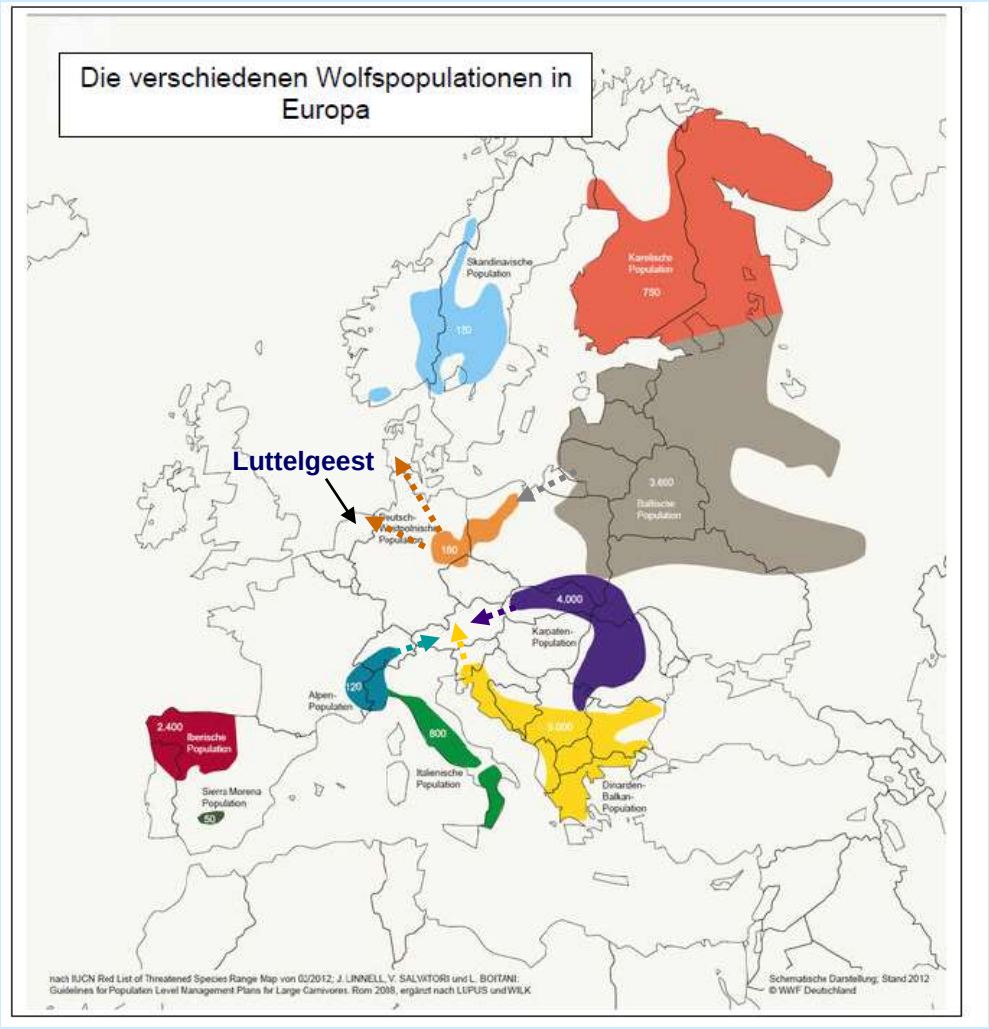
-wolves in **Denmark** came from Germany

-wolves in **Austria** from three groups

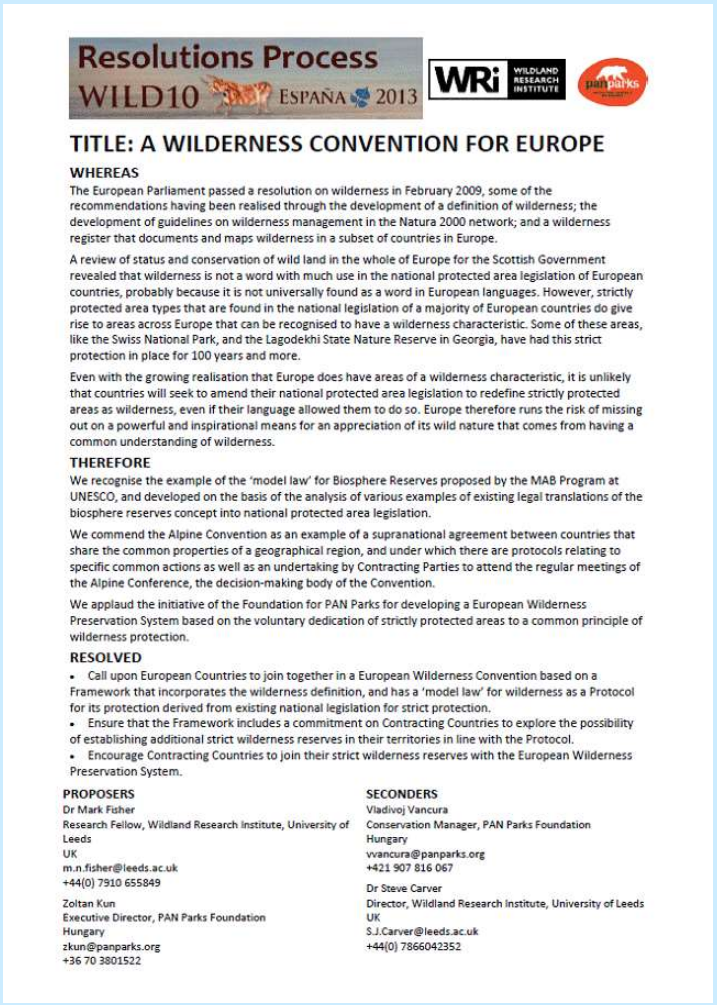
-Netherlands: animal strongly resembling a wolf was “hit and killed” July 2013 by a car near the town of Luttelgeest



Distribution of potential wolf territories within 1Km of prime areas



A WILDERNESS CONVENTION FOR EUROPE



Resolutions Process
WILD10 ESPAÑA 2013

WRi WILDLAND RESEARCH INSTITUTE

pan parks

TITLE: A WILDERNESS CONVENTION FOR EUROPE

WHEREAS

The European Parliament passed a resolution on wilderness in February 2009, some of the recommendations having been realised through the development of a definition of wilderness; the development of guidelines on wilderness management in the Natura 2000 network; and a wilderness register that documents and maps wilderness in a subset of countries in Europe.

A review of status and conservation of wild land in the whole of Europe for the Scottish Government revealed that wilderness is not a word with much use in the national protected area legislation of European countries, probably because it is not universally found as a word in European languages. However, strictly protected area types that are found in the national legislation of a majority of European countries do give rise to areas across Europe that can be recognised to have a wilderness characteristic. Some of these areas, like the Swiss National Park, and the Lagodekhi State Nature Reserve in Georgia, have had this strict protection in place for 100 years and more.

Even with the growing realisation that Europe does have areas of a wilderness characteristic, it is unlikely that countries will seek to amend their national protected area legislation to redefine strictly protected areas as wilderness, even if their language allowed them to do so. Europe therefore runs the risk of missing out on a powerful and inspirational means for an appreciation of its wild nature that comes from having a common understanding of wilderness.

THEREFORE

We recognise the example of the 'model law' for Biosphere Reserves proposed by the MAB Program at UNESCO, and developed on the basis of the analysis of various examples of existing legal translations of the biosphere reserves concept into national protected area legislation.

We commend the Alpine Convention as an example of a supranational agreement between countries that share the common properties of a geographical region, and under which there are protocols relating to specific common actions as well as an undertaking by Contracting Parties to attend the regular meetings of the Alpine Conference, the decision-making body of the Convention.

We applaud the initiative of the Foundation for PAN Parks for developing a European Wilderness Preservation System based on the voluntary dedication of strictly protected areas to a common principle of wilderness protection.

RESOLVED

- Call upon European Countries to join together in a European Wilderness Convention based on a Framework that incorporates the wilderness definition, and has a 'model law' for wilderness as a Protocol for its protection derived from existing national legislation for strict protection.
- Ensure that the Framework includes a commitment on Contracting Countries to explore the possibility of establishing additional strict wilderness reserves in their territories in line with the Protocol.
- Encourage Contracting Countries to join their strict wilderness reserves with the European Wilderness Preservation System.

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Wilderness is a powerful and inspirational means of appreciating wild nature that comes from having a common understanding

A Wilderness Convention for Europe gets around not having the word in protected area legislation or in all European languages (wild nature - *dikimi priroda*, *nature sauvage*, *salvaje*, *natura selvaggia incorrotta*, *põlisloodus*, *yaban hayati*, *gyvoji gamta*, *viata sălbăticie*)

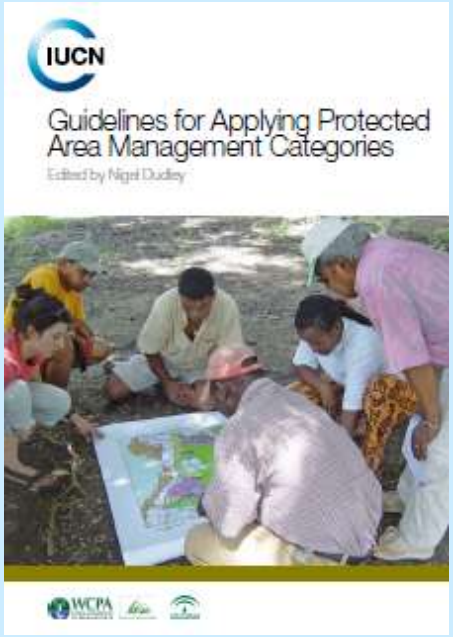
The Framework Convention will be based on the Wild Europe Definition of Wilderness, and will have a Protocol for wilderness based on the strict protection across Europe

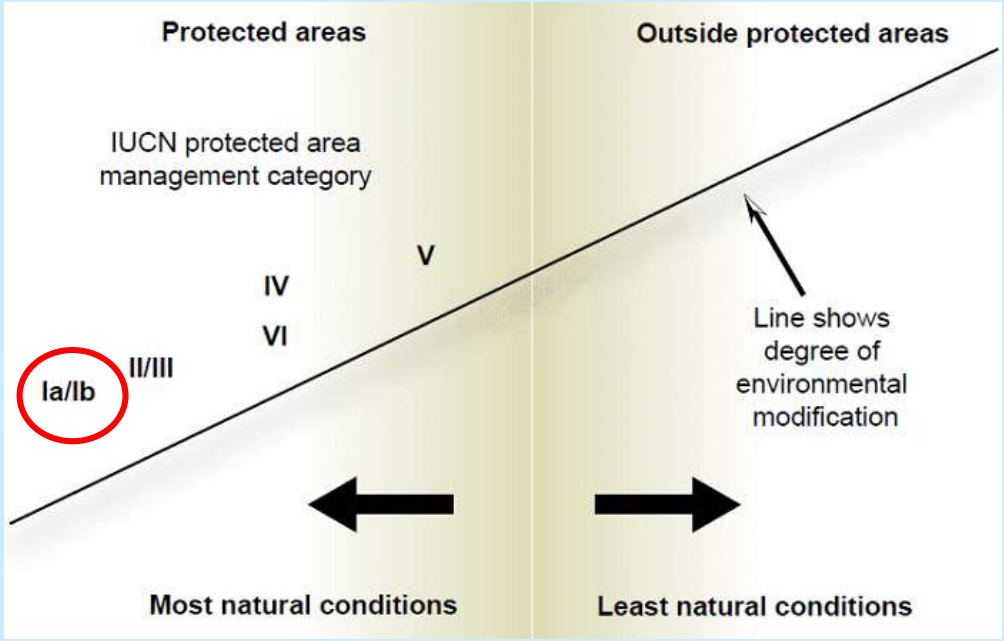
Wilderness identified through the Convention can join the European Wilderness Preservation System

Strict Protection through classification within Management Categories

"A wilderness is an area **governed by natural processes**. It is composed of native habitats and species, and large enough for the effective ecological functioning of natural processes. It is unmodified or only slightly modified and **without intrusive or extractive human activity**, settlements, infrastructure or visual disturbance"

A Working Definition of European Wilderness – Wild Europe



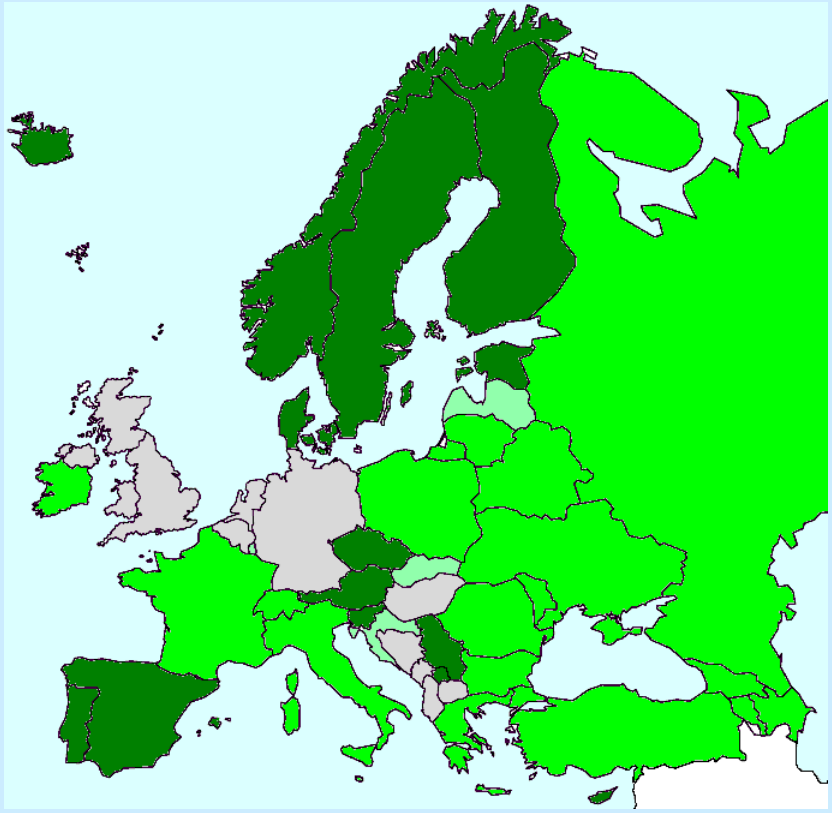


Category Ia are strictly protected areas where human visitation, **use and impacts are strictly controlled** and limited to ensure protection of the conservation values

Category Ib protected areas are protected and managed so as to **preserve their natural condition**

Strict protection could equate to the wilderness definition

Strictly protected areas across Europe – IUCN Category Ia and Ib



	Cat Ia	Cat Ib
Austria	3	4
Cyprus	1	1
Czech Rep.	1	6
Denmark	6	14
Estonia	29	857
Finland	20	6
Iceland	2	2
Kosovo	6	3
Malta	3	65
Norway	1866	1
Portugal	18	5
Serbia	7	1
Slovenia	6	50
Spain	6	8
Sweden	1792	120

	Cat Ia	Cat Ib
Belgium		
Bosnia IH		
Germany		
Hungary		
Montenegro		
Netherlands		
UK		

	Cat Ia	Cat Ib
Albania	2	
Armenia	6	
Azerbaijan	15	
Belarus	2	
Bulgaria	55	
France	37	
Georgia	20	
Greece	5	
Ireland	75	
Italy	115	
Lithuania	6	
Macedonia	1	
Moldova	5	
Poland	1	
Romania	77	
Russia	73	
Switzerland	546	
Turkey	518	
Ukraine	23	

	Cat Ia	Cat Ib
Croatia		2
Latvia		4
Liechtenstein		9
Luxembourg		34
Slovakia		607

Most countries (40/46) classify some of their protected areas for strict protection (Cat. Ia) or protection of natural conditions (Cat. Ib)

Is there a protected area type for strict protection in the national legislation?

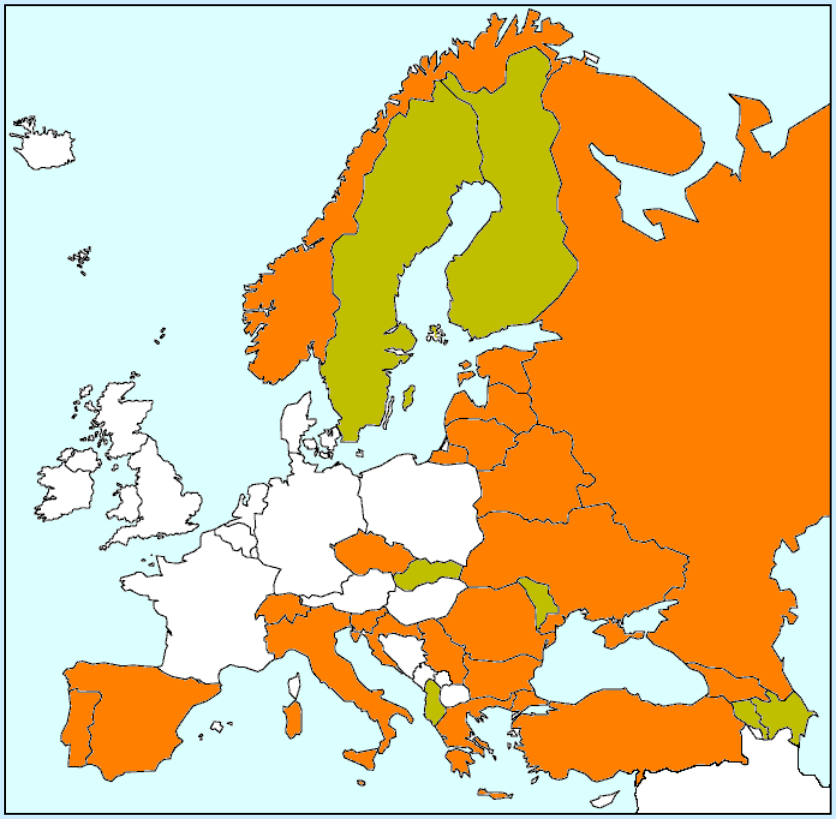
	STRICT RESERVE (IUCN Cat. Ia & Ib)	MANAGED RESERVE (IUCN Cat. IV)
Albania	Zone Strikte e Mbrojt	Rezerve Natyrore e Me
Belarus	zapovedniki	zakazniki
Bulgaria	rezervati	poddŭrzhani rezervati
Estonia	loodusreservaat/ looduslik sihtkaitsevöönd	hooldatav sihtkaitsevöönd
France (forest reserves)	réserve biologique dominiale intégrale	réserve biologique dominiale dirigée
Greece	Periochés apólytos prostasías	Periochés prostasías
Latvia	Dabas rezervats	Dabas liegums
Liechenstein	Waldreservat	Sonderwaldflaechen
Lithuania	Valstybinis rezervatas	Gamtinis draustinis
Romania	Rezervatie stiintifica	Rezervatie naturala
Russia	prirodnye zapovedniki	prirodnye zakazniki
Slovakia	prírodná rezervácia	chránený areál
Slovenia	strogi naravni rezervat	naravni rezervat
Spain (Asturias, Catalonia, Navarre)	reservas naturales, integrals	reservas naturales parciales
Turkey	Tabiatı koruma alanı	Muhafaza Ormanlar
Ukraine	pryrodni zapovidnyky	zakaznyky

The legislation in many countries distinguishes between strictly protected reserves and managed reserves

The rich language of protected area legislation for strict protection - the exclusion of human intervention/activities

…..excludes any human intervention in natural processes
…..without human intervention
…..minimal human intervention
…..Habitats are called natural when their existence is not due to human intervention
…..self-regulation without direct human intervention
…..complete and permanent cessation of direct human intervention in the health of ecosystems
…..nature protection is the restriction of interventions that can endanger, damage or destroy conditions and forms of life
…..the protection of the ecological integrity of ecosystems and prevention of interventions and activities that could endanger that;
…..undisturbed, dynamic development be left and in which all human activities are undesirable

What activities are prohibited in strictly protected areas?



Withdrawn from economic/human activity (includes no hunting, logging, grazing)

- Belarus
- Bulgaria
- Croatia
- Czech Rep.
- Estonia
- Georgia
- Greece
- Italy
- Latvia
- Liechtenstein
- Lithuania
- Montenegro
- Norway
- Portugal
- Romania
- Russia
- Serbia
- Slovenia
- Spain (Asturias, Catalonia, Navarre)
- Switzerland
- Turkey
- Ukraine

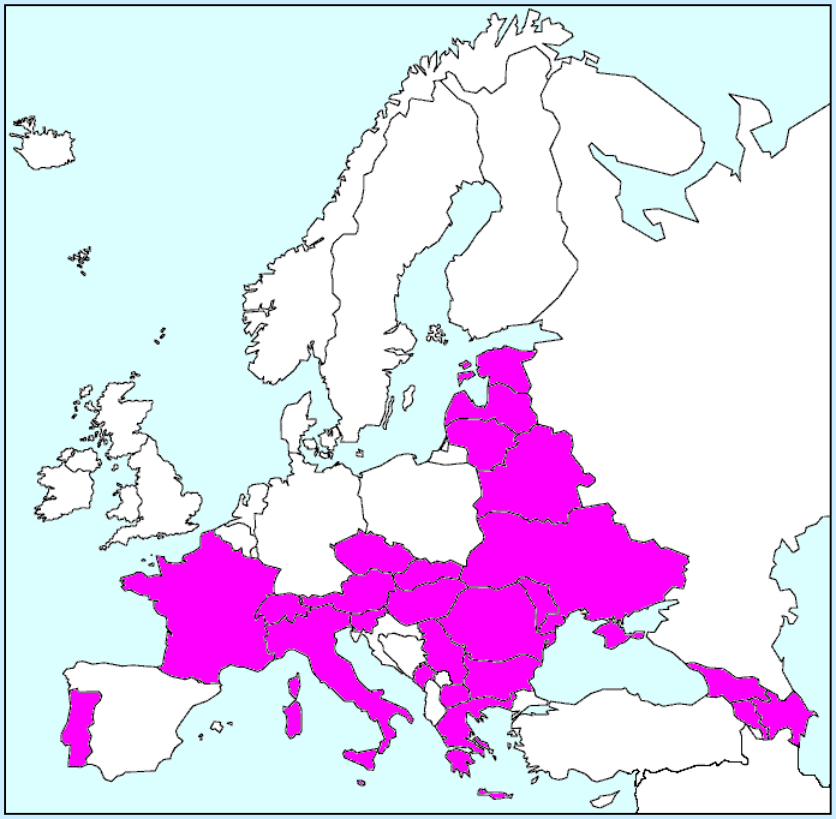
NO Hunting, logging, grazing

- Albania
- Armenia
- Azerbaijan
- Finland
- Moldova
- Slovakia
- Sweden

Other activities prohibited in strictly protected areas include fishing, mineral extraction, construction, use of chemicals and fertilizers, lighting fires, introducing non-native species, water abstraction, waste disposal, and transport

National Parks contribute to a wilderness characteristic

- strictly protected core zones in the protected area legislation for National Parks (IUCN Cat II)



Core Zone
Greece
Switzerland

Full Protection Area
Moldova
Portugal
Romania

Integral Nature Reserve
France

Natural Zone
Austria
Hungary

Natural Strict Protection Zone
Georgia
Lithuania

Reserve Zone
Armenia
Bulgaria
Italy
Latvia
Ukraine

Special Management Zone
Estonia

Special Protection Zone
Azerbaijan

Strict Protection Zone
Czech Rep.
Macedonia
Montenegro
Serbia

Wilderness Protection Zone
Belarus

-National Parks in these countries could contribute up to a maximum of 4m Ha of **strictly protected core zone** ~ 0.2%

-**Strict core zones** in National Parks implemented through management plans also contribute

CONCLUSIONS

There is a **wilderness characteristic** in Europe

It is a **SECONDARY WILDERNESS** from ecological restoration under strict protection

The greatest potential for wilderness characteristic is where there is existing or returning **TROPHIC DIVERSITY**

Adequately protected **SECONDARY WILDERNESS** is a safe refuge and reference for natural systems, as repositories of trophic diversity, and especially for endemic species

We can identify and protect areas of **HIGH POTENTIAL** for wilderness characteristic, but **WILD NATURE** chooses where it wants to be – **WE CANNOT "manage" wilderness** for species

Support the Congress resolution on a Wilderness Convention and the EWPS