



**Thomas Church (1902-78)**

The Donnell Garden  
Sonoma, Kalifornia 1947

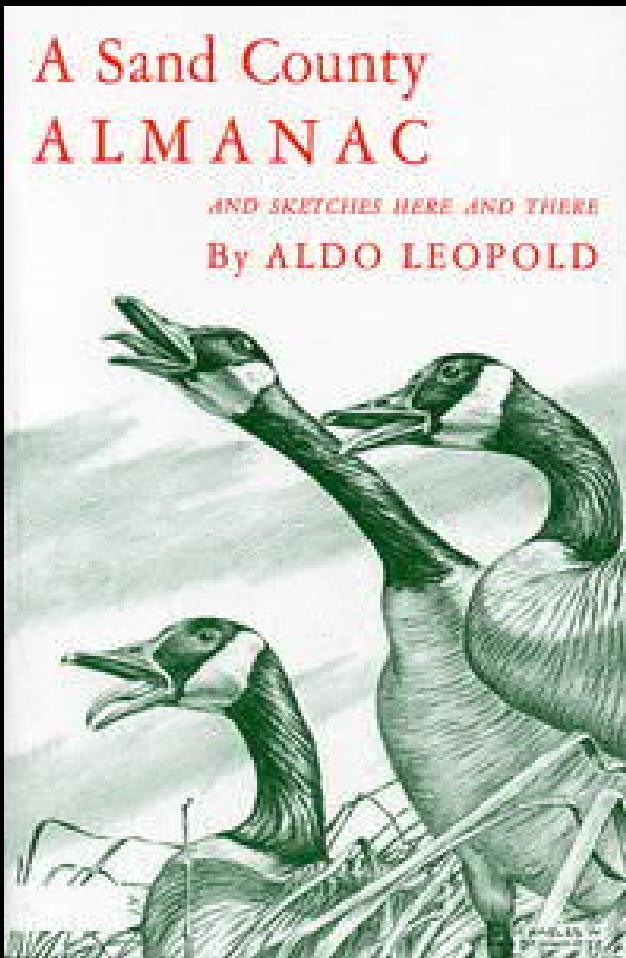
McGRAW-HILL BOOK COMPANY *New York, Toronto, London, Sydney*

# The Landscape We See

GARRETT ECKBO



1949



1952

**1962**

# SILENT SPRING

By Rachel Carson

A REPORT BY

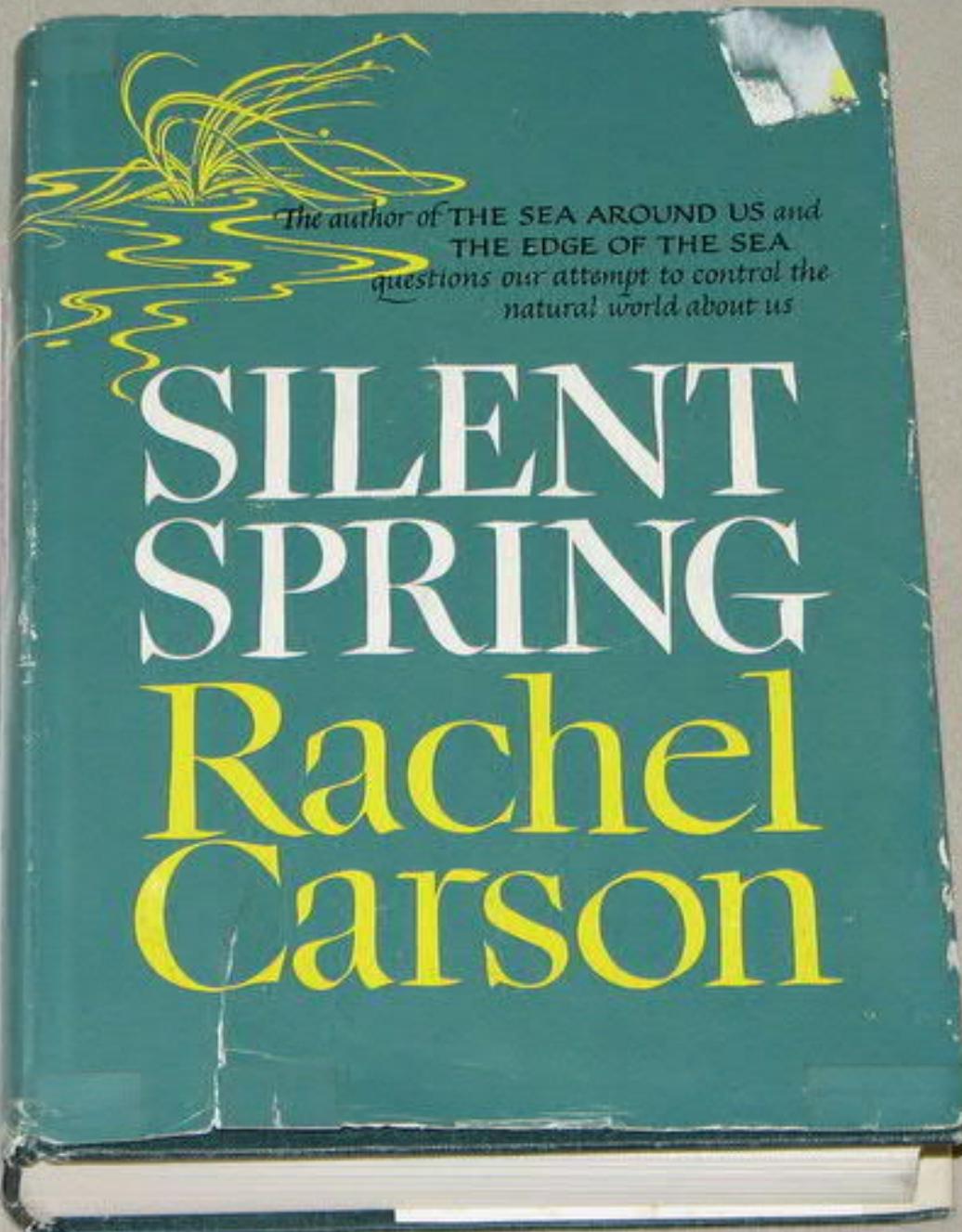
Justice William O. Douglas

Reprinted from the back of the Month Club News



RACHEL CARSON, the author-biologist who wrote *The Sea Around Us* and *The Edge of the Sea*, now adds another illustrious book to her list. The title sets the mood of the text: man's power of destruction is now so great that, some coming spring, the birds and the bees may be extinct and there may be no fish to cause a swirl on the smooth waters of our lakes. Poisons are in all the menus; the insolubles that make up many insecticides are eventually stored in human

CONTINUED ON OTHER SIDE





# **YMPÄRISTÖHERÄÄMINEN**

**Friends of the Earth 1969,  
Greenpeace 1971,  
Chipko Movement 1974**

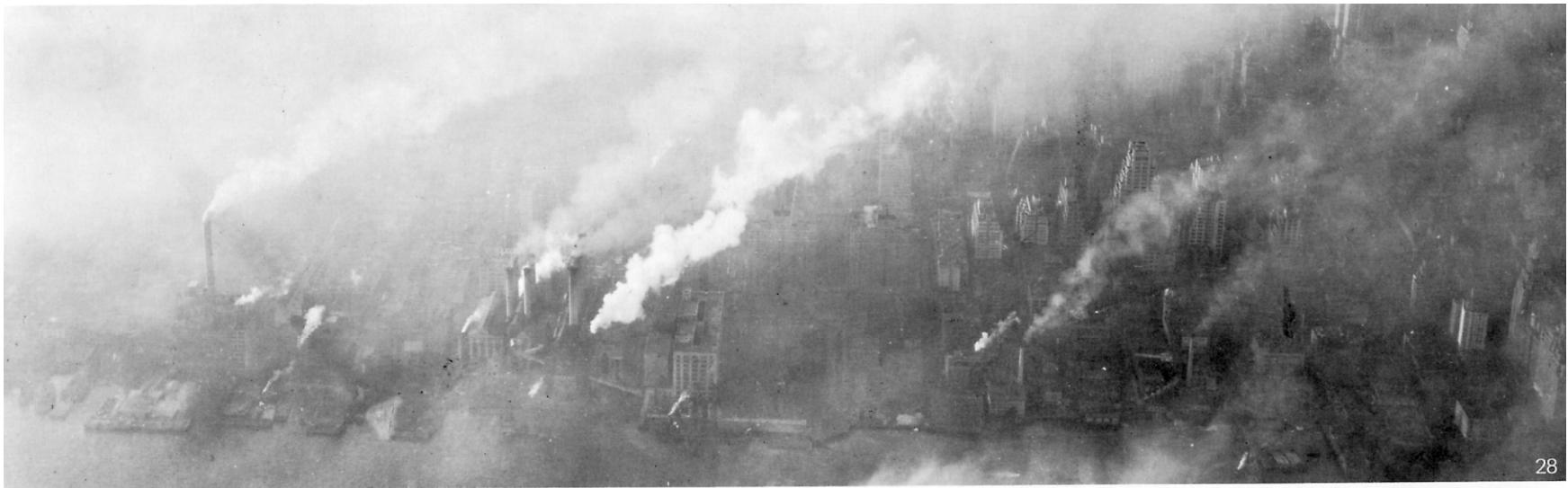
**James Lovelock (1919-): Gaia Hypoteesi 1979**

**Arne Naess (1912-2009): Deep Ecology 1972/73, Ecosophy T**

**Die Grünen, 1970-luku**



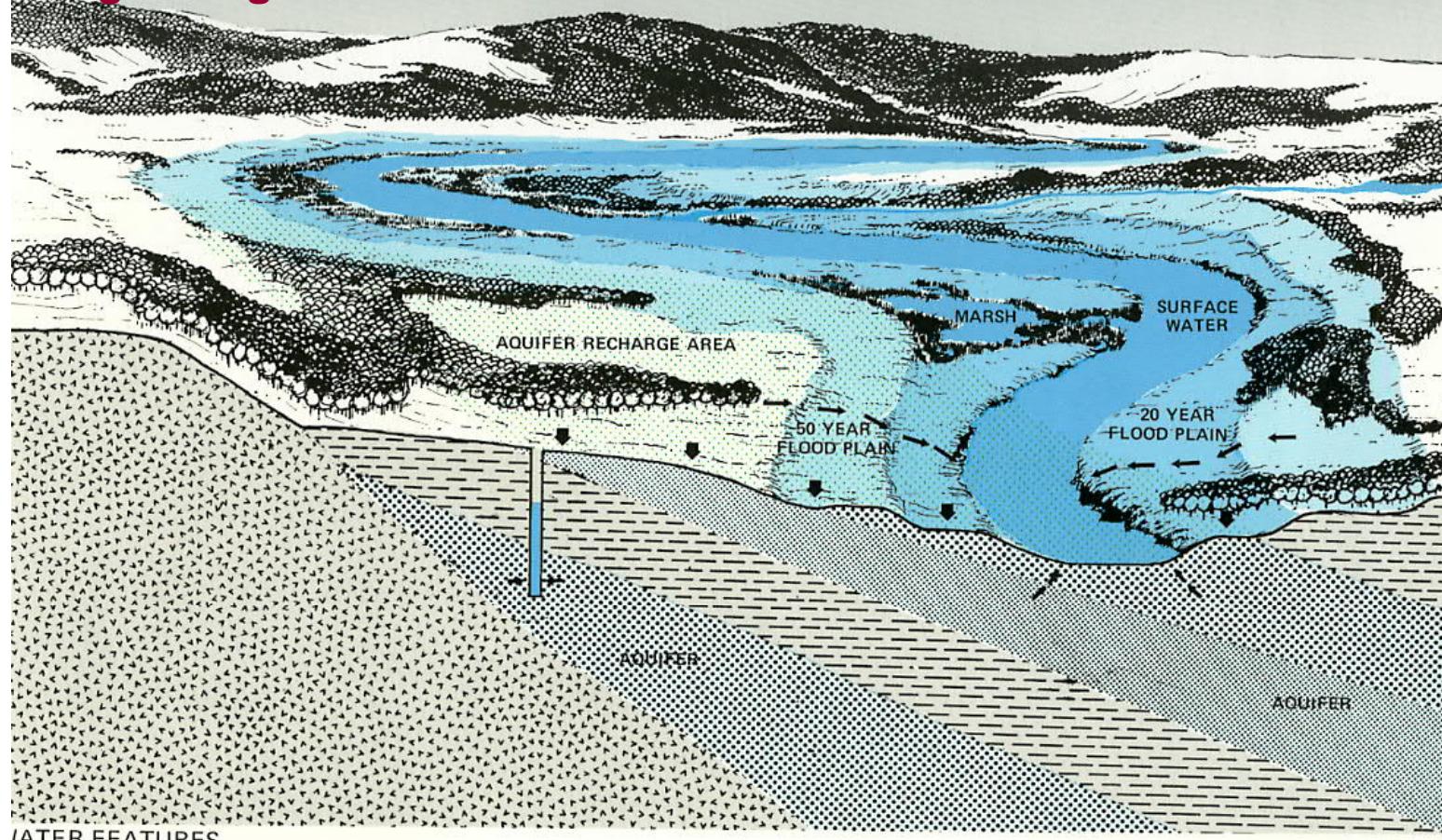
## Ian McHarg: Design with Nature 1968



28



29



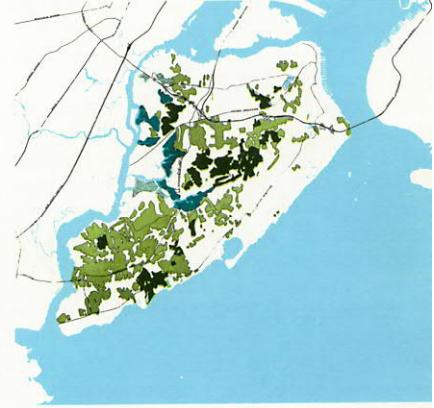
# Ian McHarg: Design with Nature

1968



EXISTING VEGETATION

FOREST: ECOLOGICAL ASSOCIATIONS



EXISTING WILDLIFE HABITATS

FOREST: EXISTING QUALITY



SOIL LIMITATIONS: FOUNDATION

SOIL LIMITATIONS: WATER-TABLE

ECOLOGICAL FACTOR

1968

RANKING CRITERIA

PHENOMENA RANK

I II III IV V

VALUE FOR LAND USE

C P A R I

## CLIMATE

AIR POLLUTION	INCIDENCE MAX ► MIN	High	Medium	Low		Lowest
TIDAL INUNDATION	INCIDENCE MAX ► MIN	Highest Recorded	Highest Projected			Above Flood Line

## GEOLGY

FEATURES OF UNIQUE, SCIENTIFIC AND EDUCATIONAL VALUE	SCARCITY MAX ► MIN	1 Ancient Lakebeds 2 Drainage Outlets 3 Boulder Trail	1 Terminal Moraine 2 Limit of Glaciation 3 Boulder Trail	Serpentine Hill	Palisades Outlier	1 Beach 2 Buried Valleys 3 Clay Pits 4 Gravel Pits
FOUNDATION CONDITIONS	COMPRESSIVE STRENGTH MAX ► MIN	1 Serpentine 2 Diabase	Shale	Cretaceous Sediments	Filled Marsh	Marsh and Swamp

## PHYSIOGRAPHY

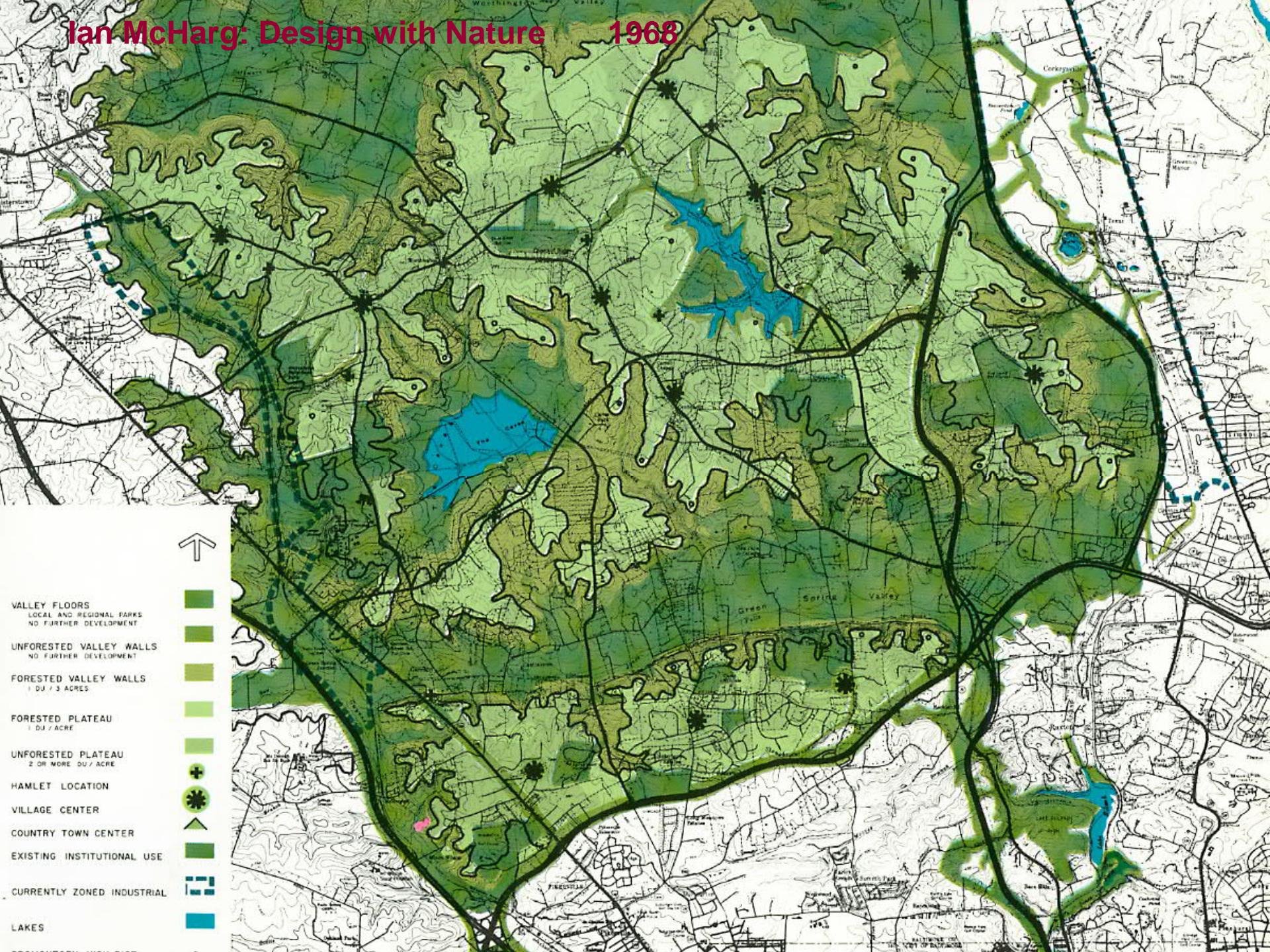
FEATURES OF UNIQUE, SCIENTIFIC AND EDUCATIONAL VALUE	SCARCITY MAX ► MIN	Hummocks and kettleholes within the Terminal Moraine	Palisades Outlier	Moraine Scarps and lakes along the Bay Shore	Breaks in Serpentine Ridge	
LAND FEATURES OF SCENIC VALUE	DISTINCTIVE MOST ► LEAST	Serpentine Ridge and Promontories	Beach	1 Escarpments 2 Enclosed Valleys	1 Berms 2 Promontories 3 Hummocks	Undifferentiated
WATER FEATURES OF SCENIC VALUE	DISTINCTIVE MOST ► LEAST	Bay	Lake	1 Pond 2 Streams	Marsh	1 The Narrows 2 Kill Van Kull 3 Arthur Kill
RIPARIAN LANDS OF WATER FEATURES	VULNERABILITY MOST ► LEAST	Marsh	1 Stream 2 Ponds	Lake	Bay	1 The Narrows 2 Kill Van Kull 3 Arthur Kill
BEACHES ALONG THE BAY	VULNERABILITY MOST ► LEAST	Moraine Scarps	Coves	Sand Beach		
SURFACE DRAINAGE	PROPORTION OF SURFACE WATER TO LAND AREA MOST ► LEAST	Marsh and swamp	Areas of constricted drainage	Dense stream/swale network	Intermediate stream/swale network	Sparse stream/swale network
SLOPE	GRADIENT HIGH ► LOW	Over 25%	25–10%	10–5%	5–2%	2½–0%

## HYDROLOGY

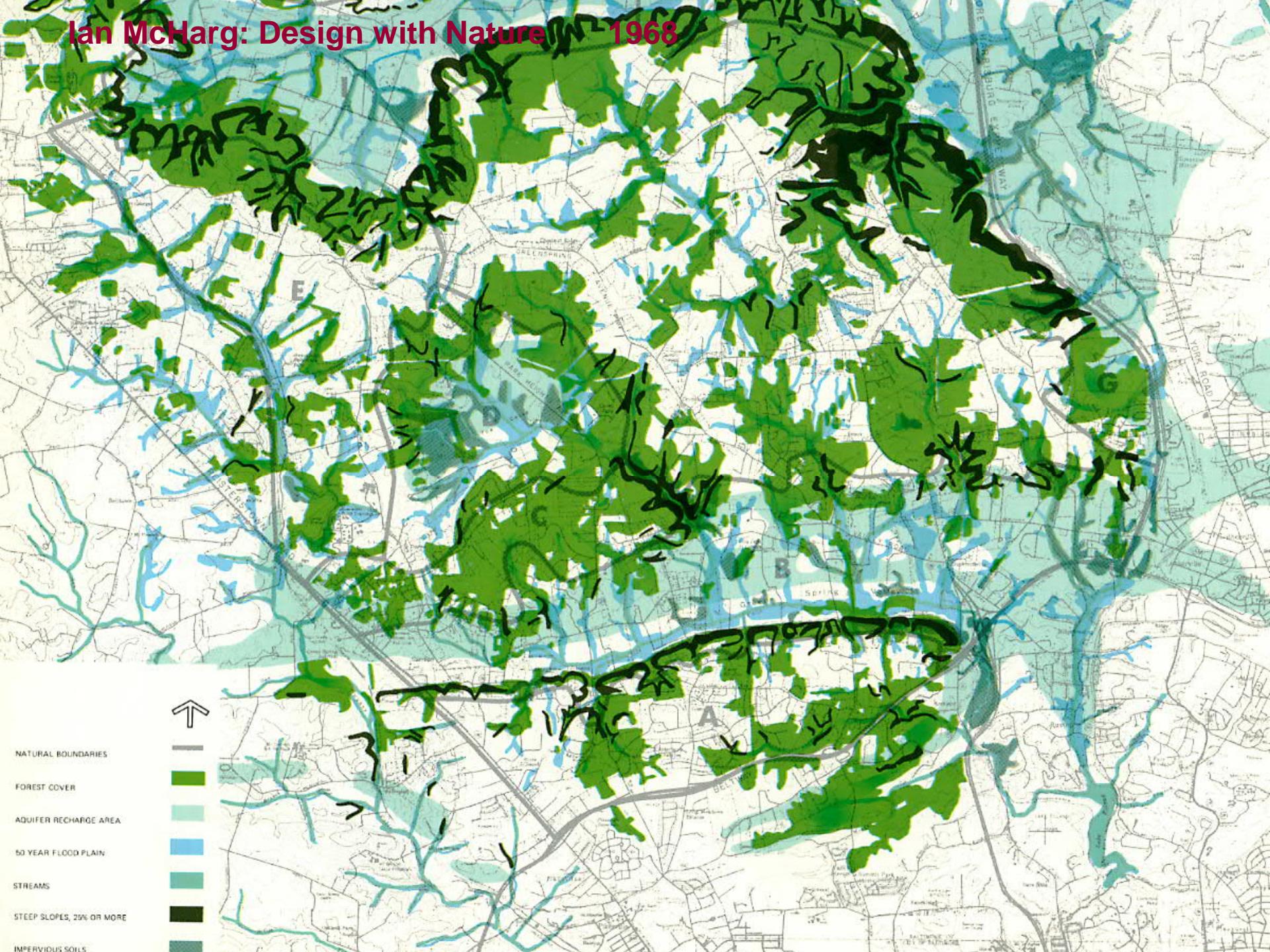
MARINE Commercial Craft	NAVIGABLE CHANNELS DEEPEST ► SHALLOWEST	The Narrows	Kill Van Kull	Arthur Kill	Fresh Kill	Raritan Bay
Pleasure Craft	FREE EXPANSE OF WATER LARGEST ► SMALLEST	Raritan Bay	Fresh Kill	The Narrows	Arthur Kill	Kill Van Kull
FRESH WATER Active recreation (swimming, paddling, model-boat sailing, etc.)	EXPANSE OF WATER LARGEST ► SMALLEST	Silver Lake	1 Clove Lake 2 Grassmere Lake 3 Ohrbach Lake 4 Arbutus Lake 5 Wolfe's Pond	Other ponds	Streams	
Stream-side recreation (fishing, trails, etc.)	SCENIC MOST ► LEAST	Nonurbanized perennial streams	Nonurbanized intermittent streams	Semiurbanized streams	Urbanized streams	
WATERSHEDS FOR STREAM QUALITY PROTECTION	SCENIC STREAMS MOST ► LEAST	Nonurbanized perennial streams	Nonurbanized intermittent streams	Semiurbanized streams	Urbanized streams	
AQUIFERS	YIELD HIGHEST ► LOWEST	Buried valleys		Cretaceous Sediments		Crystalline rocks
AQUIFER RECHARGE ZONES	IMPORTANT AQUIFERS MOST ► LEAST	Buried valleys		Cretaceous Sediments		Crystalline rocks

C CONSERVATION; P PASSIVE RECREATION; A ACTIVE RECREATION; R RESIDENTIAL DEVELOPMENT; I COMMERCIAL & INDUSTRIAL DEVELOPMENT

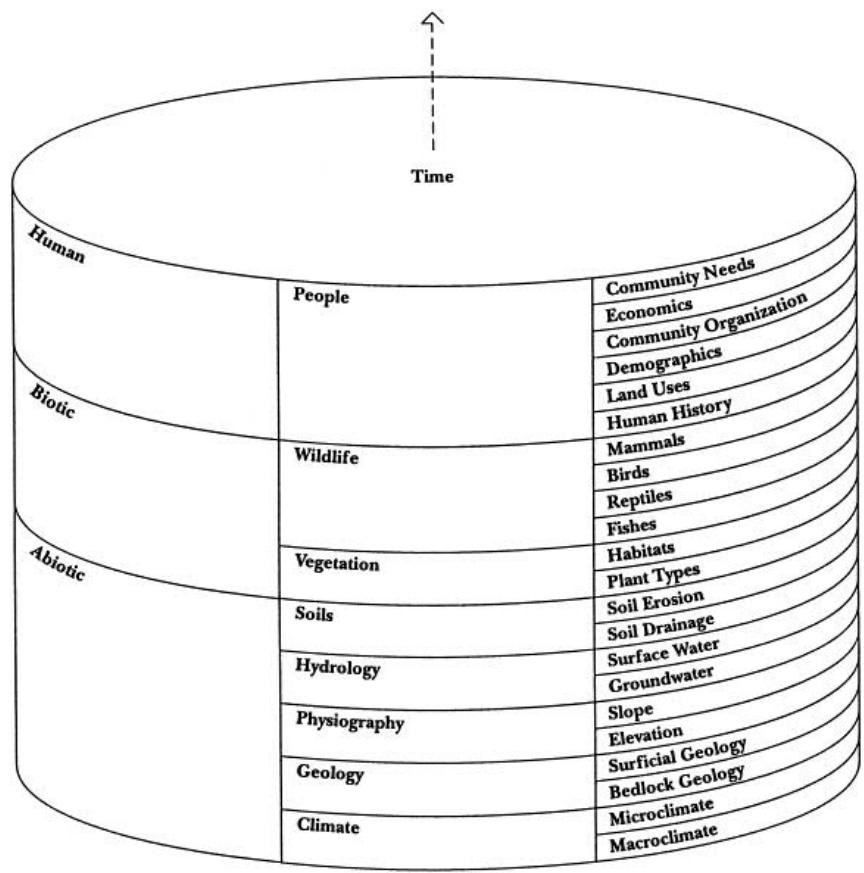
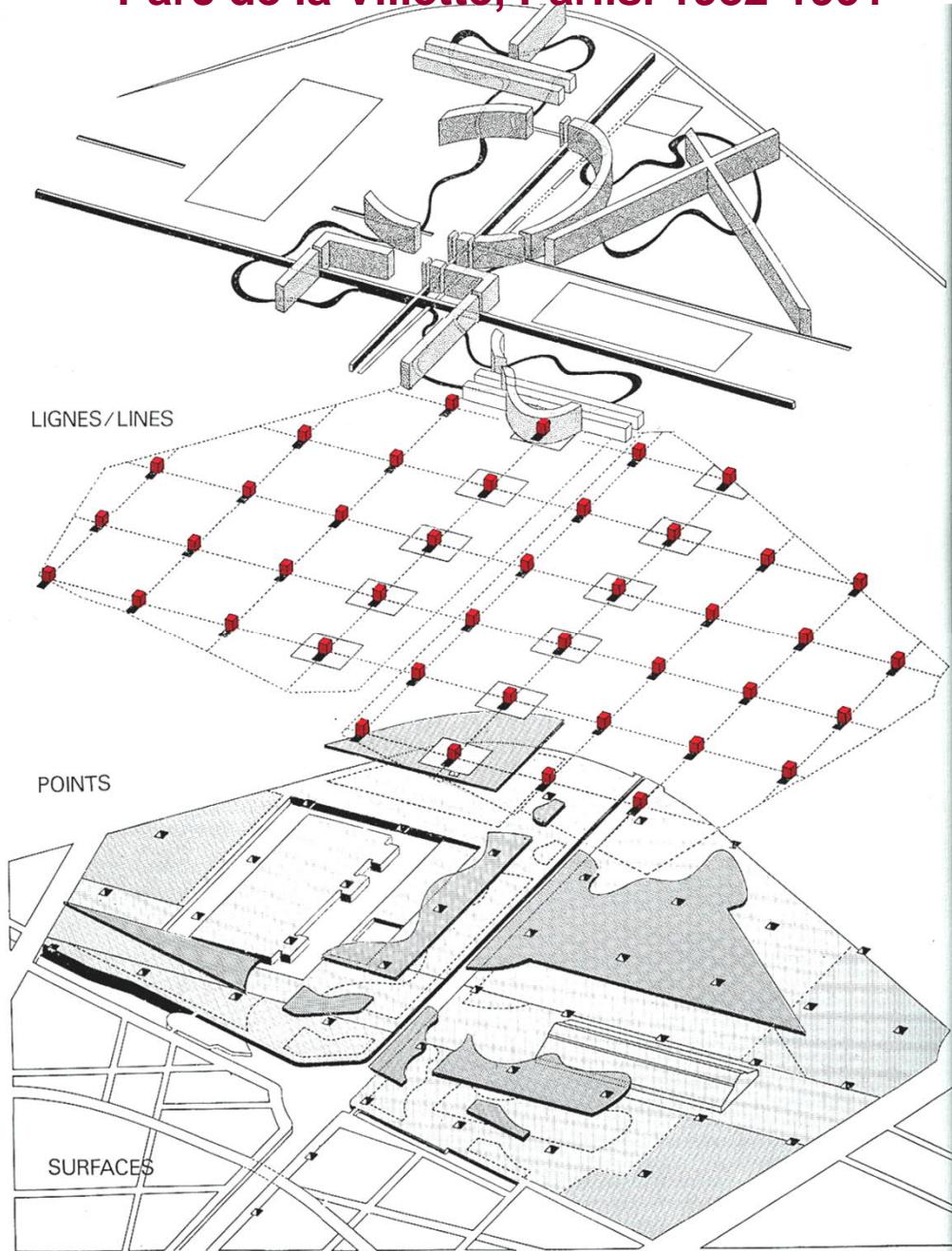
# Ian McHarg: Design with Nature 1968



# Ian McHarg: Design with Nature 1968



# Bernard Tschumi: Parc de la Villette, Paris 1982-1991



"Layer Cake" / Ian McHarg

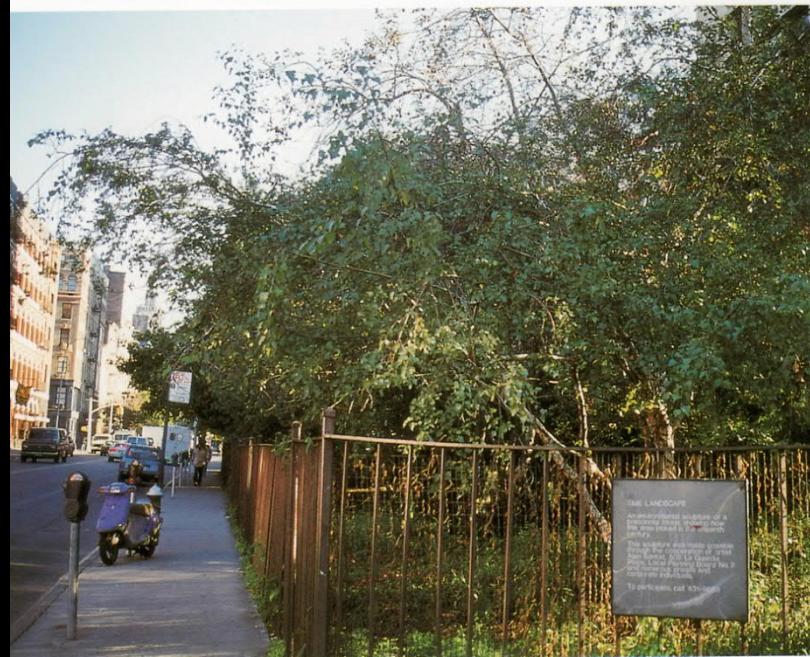
# Ian McHarg: Design with Nature 1968





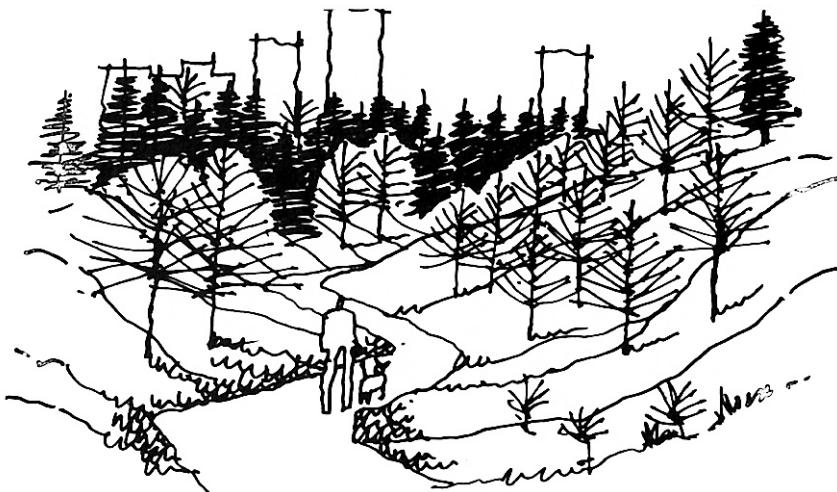
**Robert Smithson (1938-1973)**  
**Asphalt Rundown 1969**

**Alan Sonfist (1946-) :**  
**Time Landscape 1965, (1978)**



WILDLIFE HABITAT TYPES  
Remnant rural landscapes

# Michael Hough: City form and natural process, 1984



Remnant woodlands and corridors within the city's boundaries



Abandoned industrial sites



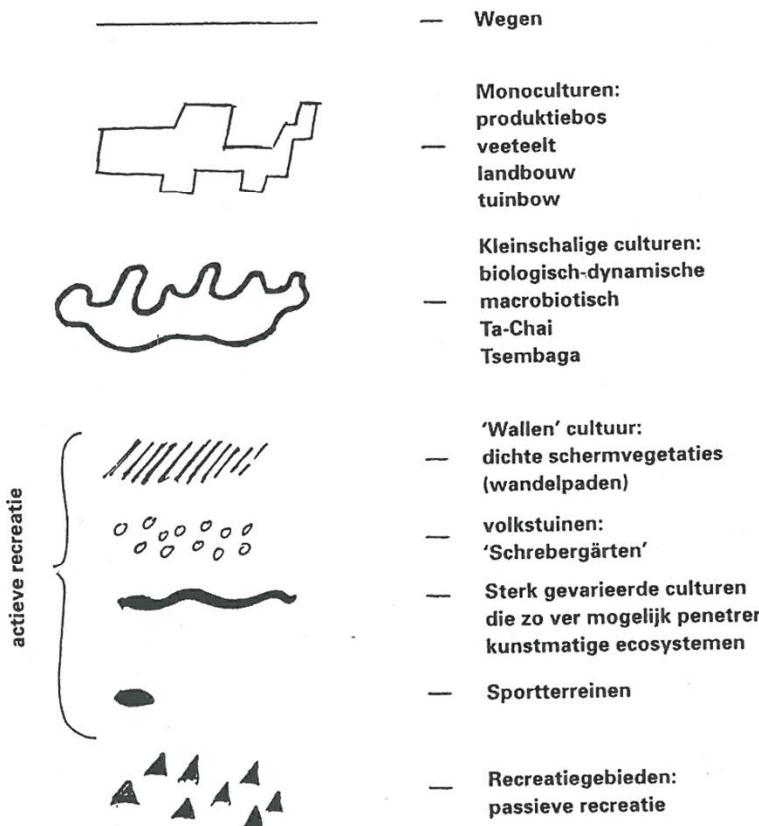
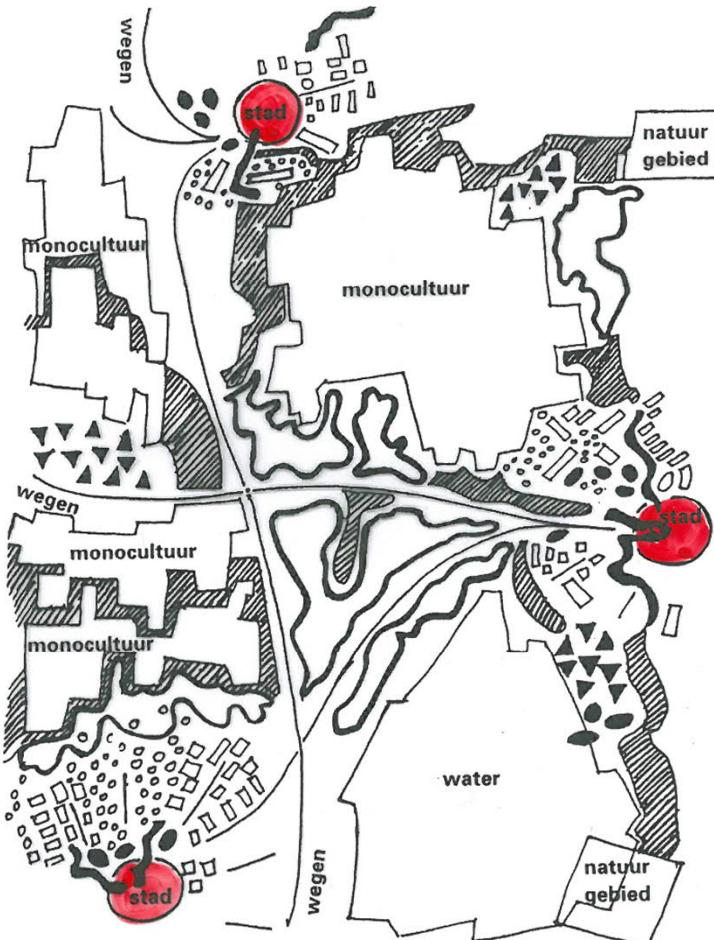
Remnant marshes



Aquatic wintering grounds

# Louis le Roy (1924-2012)

<http://www.ecokathedraal.nl/>



# Natur ausschalten - Natur einschalten

„Man soll wachsen lassen,  
was wächst, und mensch-  
liche Eingriffe auf das Aller-  
notwendigste beschränken  
- die Natur ordnet sich  
schon selbst.“



Louis G. Le Roy













Kirchstraße

Aug



11150





GÖTTERBAUM, jumaltenpuu  
*Ailanthus altissima*



GÖTTERBAUM, jumaltenpuu  
*Ailanthus altissima*

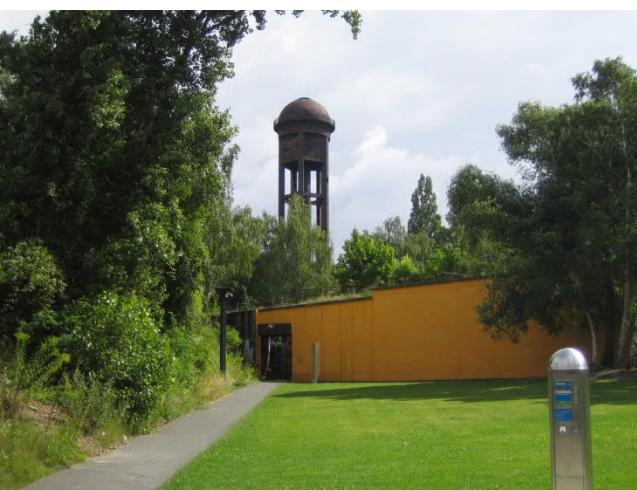


GÖTTERBAUM, jumaltenpuu  
*Ailanthus altissima*



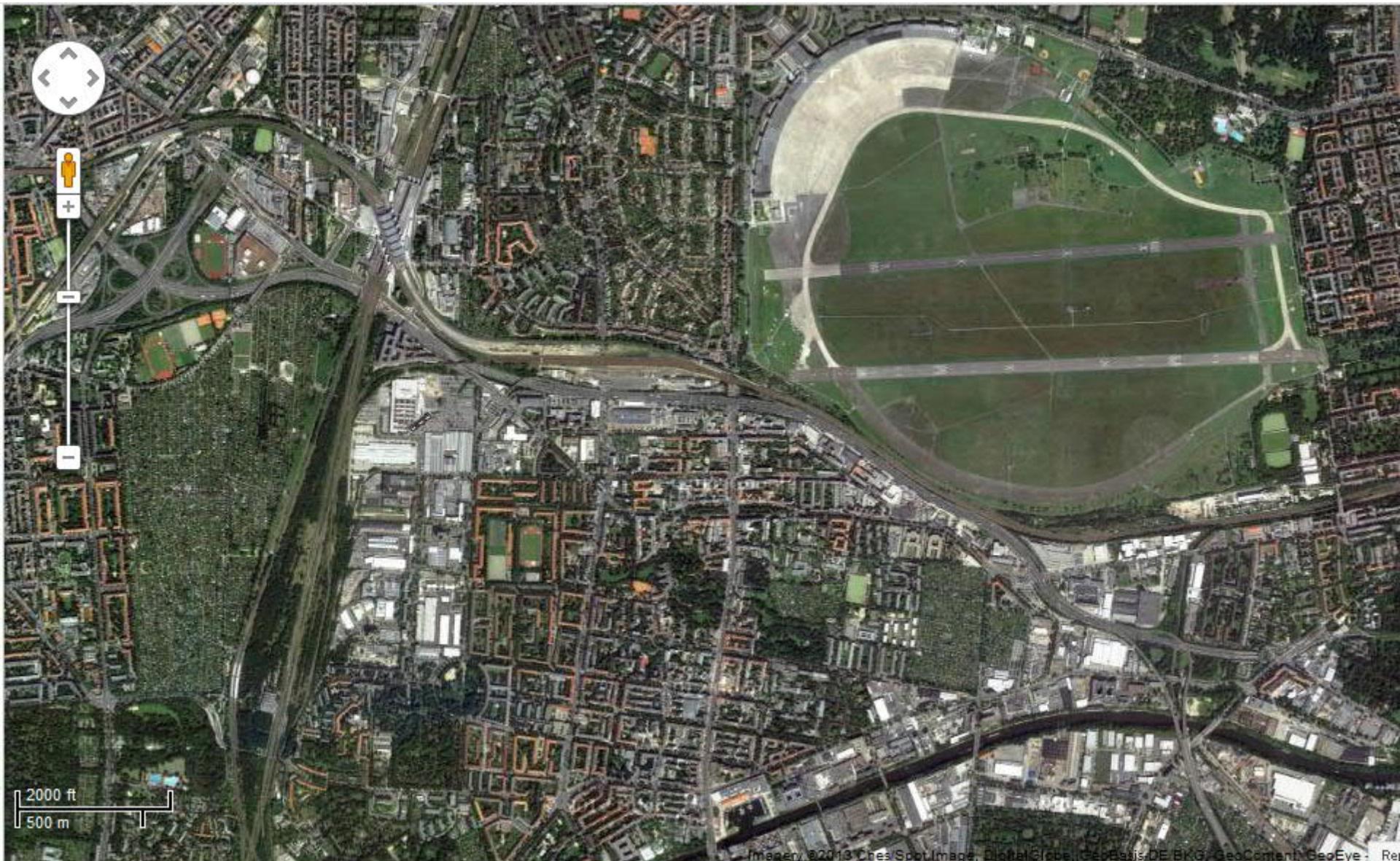
## Natur-park Schöneberger Südgelände, Berliini 1998-2000

Ingo Kowarik, Andreas Langer,  
Gruppe Odious

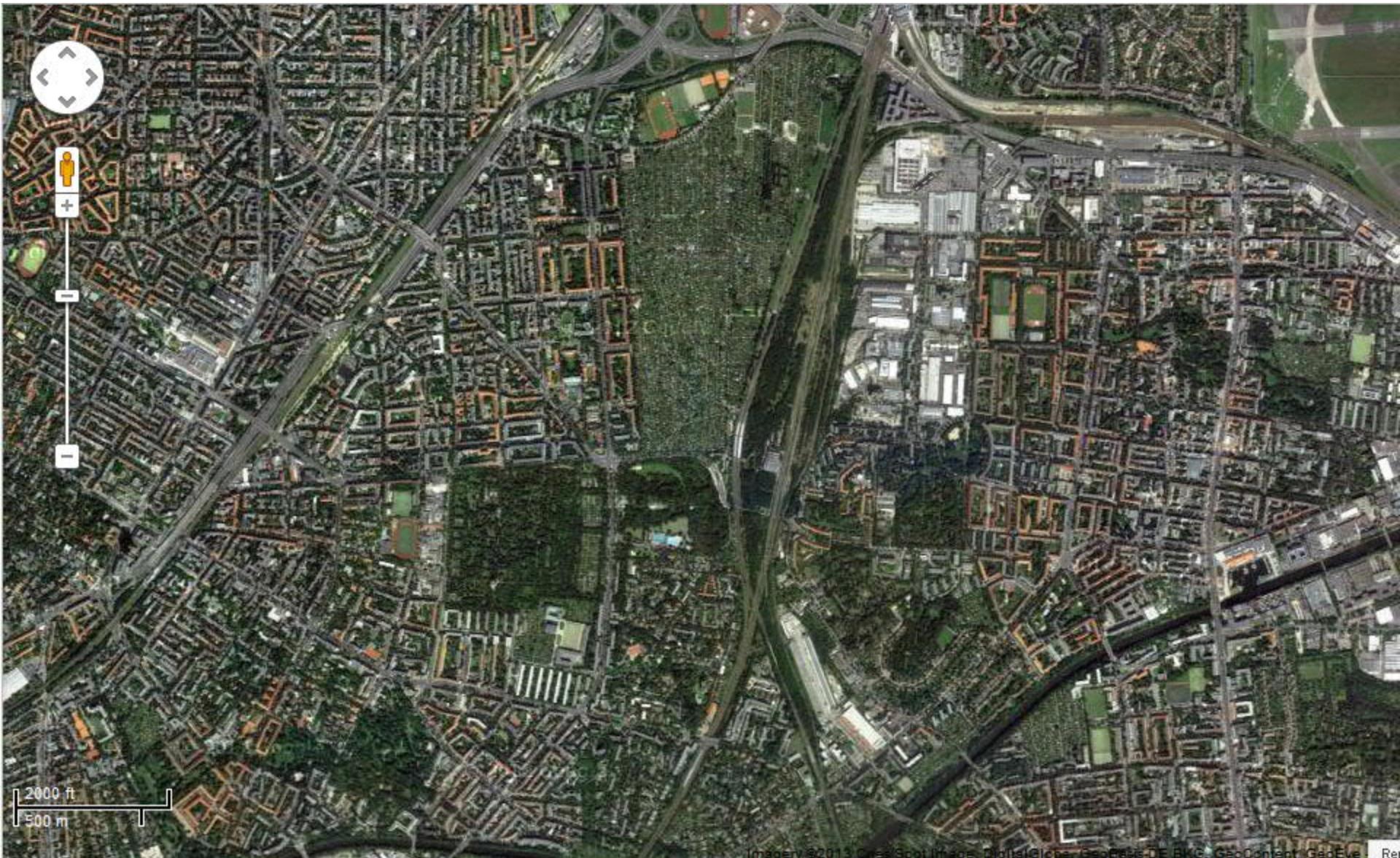


Natur-Park Schöneberger Südgelände

Tempelhofer Freiheit



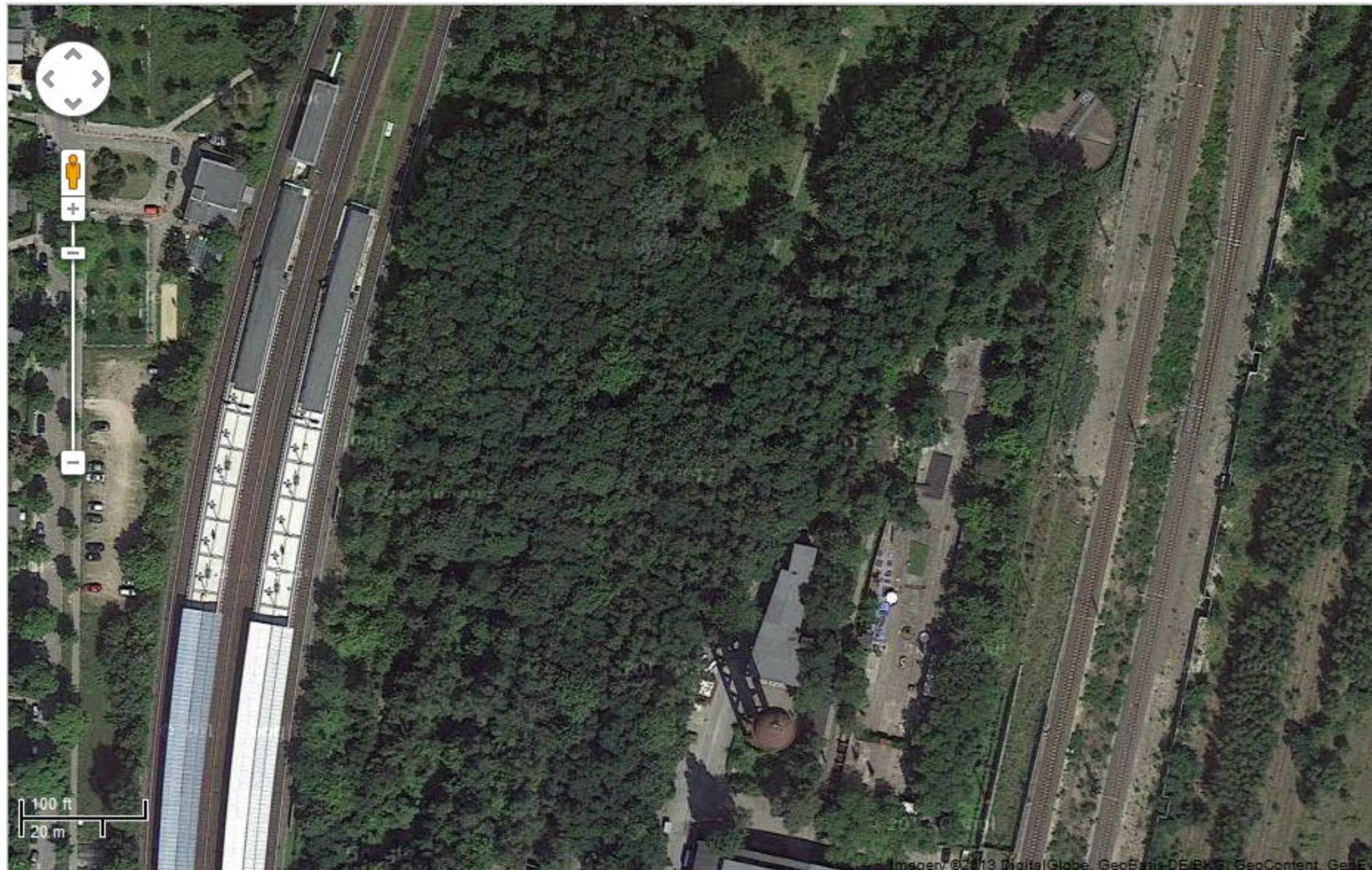
## Natur-Park Schöneberger Südgelände







Imagery ©2013 DigitalGlobe. All Rights Reserved. Content ©2013 ProB



Imagery ©2013 DigitalGlobe, GeoBasis-DE/BKG, GeoContent, GeoEye



*Robinia pseudoacacia*



















**Das Betreten der  
Wiesen im  
Naturschutzgebiet  
ist verboten**







Der Natur-Park Schöneberger Südgelande gehört aufgrund seiner kleintümigen Struktur zu den artenreichsten Brachflächen im bebauten Teil Berlins. Von besonderer Bedeutung für den Arten- und Biotopschutz sind die Trockenrasen des Naturschutzgebiets, auf denen sich ungewöhnlich viele bedrohte Tiere und Pflanzen angesiedelt haben. Ihr Vorkommen stellt den besonderen Wert des Naturschutzgebiets dar.

Mäßiglich für die Entwicklung der Offenflächen waren die nährstoffarmen, trockenen Kies- und Schotterböden des Bahngeländes. Hier entwickelte sich ein seltener Lebensraum mit einer speziell an diese Bedingungen angepassten Tier- und Pflanzenwelt.

Unter den seltenen und gefährdeten Arten weisen die Habichtskräuter bemerkenswerte Vorkommen auf. Täuscheiniges  und Geknäultköpfiges Habichtskraut .

## Gefährdete Arten zwischen Gleisen

Die Vielzahl der Heuschrecken macht die offenen Flächen mit ihren Übergangsbereichen auch akustisch zu einem Erlebnis. Markant ist der Ruf des Feld-Grashüpfers , der an eine langsam fahrende Dampflok erinnert. Auch stark gefährdete Arten wie der Heide-Grashüpfer und die Blauflügelige Ödlandschrecke  haben hier eine Heimat gefunden. Interessante Insekten sind der räuberische Bienenwolf , eine Grabwespenart, die Honigbienen jagt, und die Kuckucksbiene , die ihre Eier in die Brutzellen fremder Wirtsbienen legt. Entgegen der Ansicht, dass alle Bienen Staaten bilden, leben die meisten Arten einzeln.



Erst beim Wegspringen werden die blauen Hinterflügel der Blauflügeligen Ödlandschrecke sichtbar.



Wichtig ist ihre Aufgabe bei der Bestäubung von Blüten. Bei ihrer Nahrungssuche sind Wildbienen jedoch sehr wählerisch und besuchen nur bestimmte Pflanzen. So ist die seltene Knautien-Sandbiene  auf Wiesen-Krautarten spezialisiert. Die Blüten werden nicht nur zum Sammeln oder Nahrung, sondern auch zur Partnerfindung zum Schutz bei kühlem Wetter angeflogen.



 Brandst.

 Langer

Im Sommer entfalten die Trockenrasen ihre bunte Blütenpracht. Charakteristisch sind die violett-blühende Rispen-Flockenblume , die gelbe Sand-Strohblume  und die weißen Dolden der Gemeinen Sichelmöhre  und der Wilden Möhre. Auch Gräser wie der Rauhblattschwingel sind prägend. Auffallend ist die Nachtkerze , die ihre gelben Blüten hoch in die Luft streckt. Nur vereinzelt wachsen Sträucher. Sanddorn und Wildrosen bieten Vögeln wie der Dorngrasmücke ideale Brut- und Aussichtsplätze. Hochstauden verbinden die Lichtung mit dem Wald. Ökologisch bedeutend ist das Mosaik unterschiedlicher Offenland-Biotope.



 Kowarik

 BfN/M. B.









MET ROOM OBS.

RCB-LITE • TURNO







Park am Gleisdreieck  
Atelier Loidl  
2011-13



**Park am Gleisdreieck**  
**Atelier Loidl**  
**2011-13**

A close-up photograph of a flowering plant, likely a butterfly bush (Buddleia), showing numerous small, tubular, purple flowers clustered along its branches. The plant has large, serrated green leaves. In the background, there is a metal fence and a dense wall of green foliage.

Park am Gleisdreieck  
Atelier Loidl  
2011-13

GLEISWILDNIS  
**BITTE NICHT  
BETRETEN**

UNGSICHERTES  
GELÄNDE



Park am Gleisdreieck  
Atelier Loidl  
2011-13

# Ingo Kowarik

## Konzept der "vier Natur"

### Natur 1

ursprungliche Natur

### Natur 2

kulturlandschaftliche Natur  
als Ergebnis von Land- und Forstwirtschaft

### Natur 3

gärtnerisch hervorgebrachte Natur

### Natur 4

urban-industrielle Natur



## SLL vaalisi rikkaruohoja

■ Suomen Luonnonsuojeluliitto SLL vaatii Helsingin rikkaruohokenttiä kartoittamista suojelema varten. Sen mukaan joutomaiden rikkaruohoesiintymät ovat tärkeitä luonnon monimuotoisuuden ylläpitäjiä.

Rikkaruohokenttiä, eli ruderaatteja, esiintyy muun muassa ratapihoilla, satamissa ja vanhoilla kaatopaikoilla. Niillä tavataan varsin paljon myös uhanalaisia ja harvinaisia kasvi-, lintu- ja perhoslajeja.

Helsingin ehkä tunnetuin ruderaatti on Arabianrannassa. Luontoillasta tuttu maa-

ja metsätaloustieteen tohtori **Harri Dahlström** esittää, että Arabianrannan tuhoutuessa rakentamisen takia olisi viereinen Kyläsaaren ruderaatti säilytettävä, eikä sitä tulisi rakentaa perinteisen puiston tapaan.

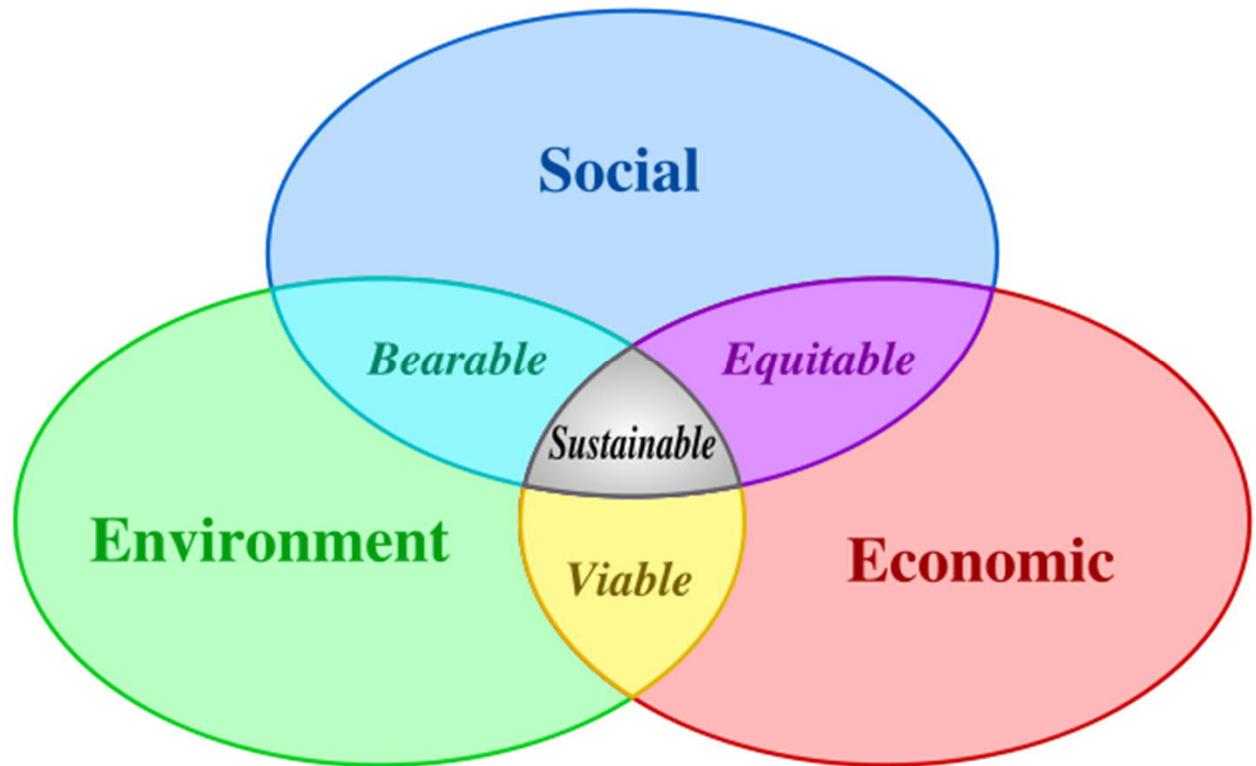
SLL:n mukaan Vuosaaren täyttömäki Helsingissä on hyvä esimerkki siitä, kuinka jättemaista voi luoda merkittäviä luontokohteita. Vuosaaren ruderaattien erikoisuksia ovat talvella tunturikiurut ja kesällä isokultasiipi. Molemmat lajit ovat Suomessa erittäin uhanalaisia.

# SUSTAINABLE DEVELOPMENT, BIODIVERSITY

Brundtland Commission 1983, Our Common Future 1987

Earth Summit Rio de Janeiro 1992  
Agenda 21

Biodiversity Convention





BIODIVERSITY CONVENTION CARTAGENA PROTOCOL NAGOYA PROTOCOL COUNTRIES PROGRAMMES

## ECOSYSTEM APPROACH

### ABOUT THE ECOSYSTEM APPROACH

- > Background
- > Description
- PROGRAMME
- > COP Decisions

### IMPLEMENTATION

- > Operational guidance
- > Principles
- > Case Studies
- > Ecosystem Approach Sourcebook
- > Ecosystem Approach e-Newsletters

### RELATED INFORMATION

- > Related Web Sites
- > Meetings
- > Documents

ECOSYSTEM APPROACH

MONDAY // 8.23.2021

# Ecosystem Approach

## Introduction

The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. It is based on the application of appropriate scientific methodologies focused on levels of biological organization which encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems.



INFORMATION ABOUT THE SECRETARIAT

Convention on Biological Diversity

BIODIVERSITY CONVENTION CARTAGENA PROTOCOL NAGOYA PROTOCOL COUNTRIES PROGRAMMES

Topics  
Processes and Meetings  
Cooperation and Partnerships  
Action Agenda  
News and Stories

UN BIODIVERSITY CONFERENCE PHASE ONE -- 11 TO 15 OCTOBER 2021

Phase one took place virtually and included a High-Level Segment from 12 to 13 October. Phase two will be an in-person meeting in Kunming, from 25 April to 8 May 2022.

16.20  
31.10.2021

# The Economics of Biodiversity: The Dasgupta Review



## We need to change how we think, act and measure success.

Humanity faces an urgent choice. Continuing down our current path – where our demands on Nature far exceed its capacity to supply – presents extreme risks and uncertainty for our economies. Sustainable economic growth and development requires us to take a different path, where our engagements with Nature are not only sustainable, but also enhance our collective wealth and well-being and that of our descendants.

Choosing a sustainable path will require transformative change, underpinned by levels of ambition, coordination and political will akin to, or even greater than, those of the Marshall Plan. The change required should be geared towards three broad transitions.

### **(i) Ensure that our demands on Nature do not exceed its supply, and that we increase Nature's supply relative to its current level.**

Food production is the most significant driver of terrestrial biodiversity loss. As the global population grows, the enormous problem of producing sufficient food in a sustainable manner will only intensify. Technological innovations and sustainable food production systems can decrease the sector's contribution to climate change, land-use change and ocean degradation; reduce environmentally damaging inputs and waste; improve production system resilience, through methods such as precision agriculture, integrated pest management and molecular breeding techniques; and are likely to have a positive economic impact, including the creation of jobs. Demand for energy is a major contributor to climate change and resulting biodiversity loss. Decarbonising our energy systems is a necessary part of balancing demand and supply.

But if we are to avoid exceeding the limits of what Nature can provide on a sustainable basis

needed to ensure those commitments are met.

## The solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it.

While most models of economic growth and development recognise that Nature is capable only of producing a finite flow of goods and services, the focus has been to show that technological progress can, in principle, overcome that exhaustibility. This is to imagine that, ultimately, humanity is 'external' to Nature.

The *Review* develops the economics of biodiversity on the understanding that we – and our economies – are 'embedded' within Nature, not external to it. The *Review's* approach is based firmly in what we know from ecology about how ecosystems function, and how they are affected by economic activity, including the extraction of natural resources for our production and consumption, and the waste we produce through these activities, which ultimately damages ecosystems and undermines their ability to provide the services on which we rely. This approach helps us to understand that the human economy is bounded and reshapes our understanding of what constitutes truly sustainable economic growth and development: accounting fully for the impact of our interactions with Nature and rebalancing our demand with Nature's capacity to supply.