

# GIORNATA MONDIALE DELLA DESERTIFICAZIONE E DELLA SICITÀ 2024

17 giugno 2024 – ore 14:30-19:00

## Giornata di Studio 30° Anniversario Convenzione UNCCD

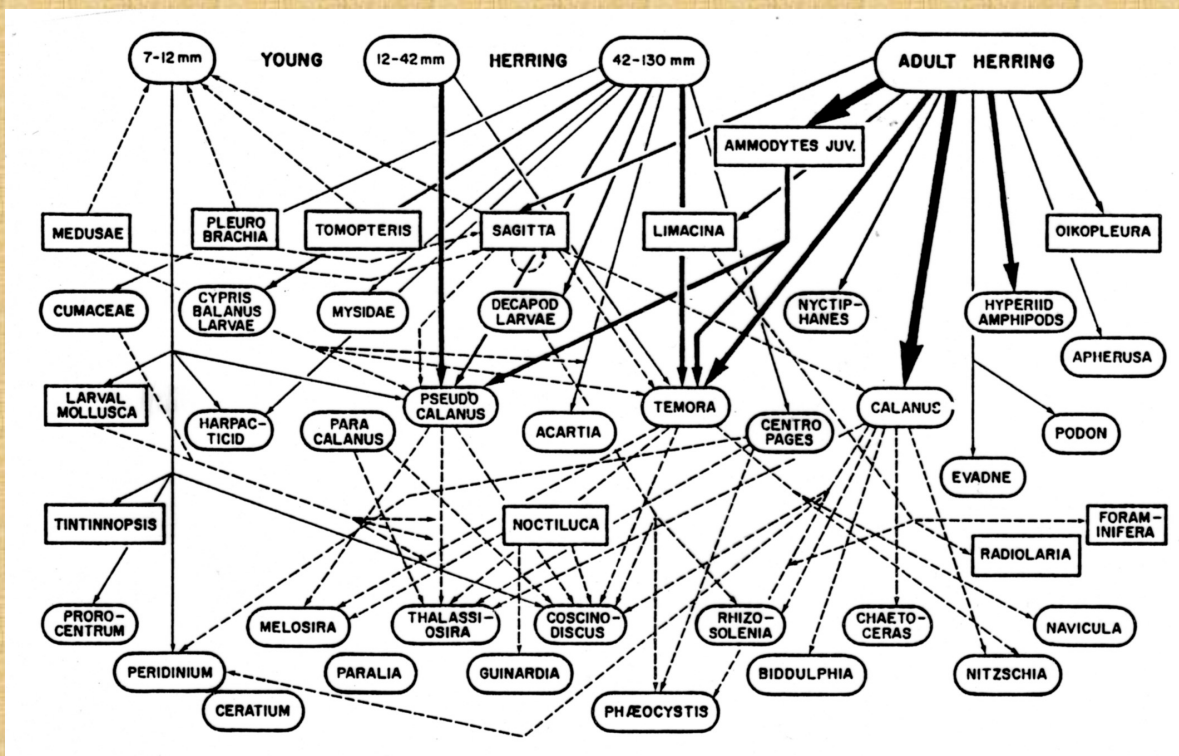
Messina, Salone delle Bandiere di Palazzo Zanca

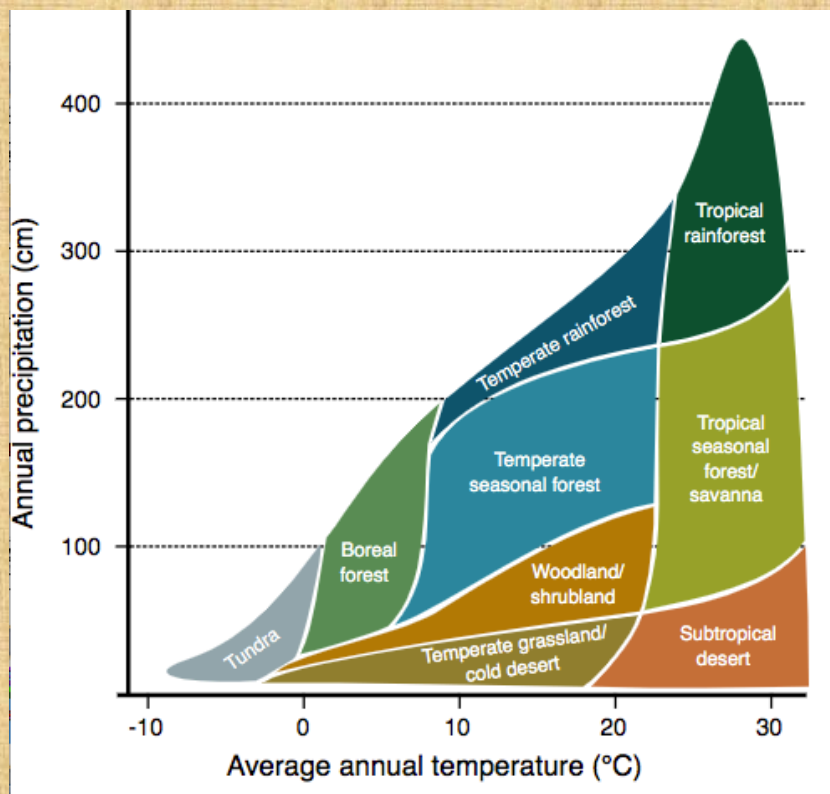
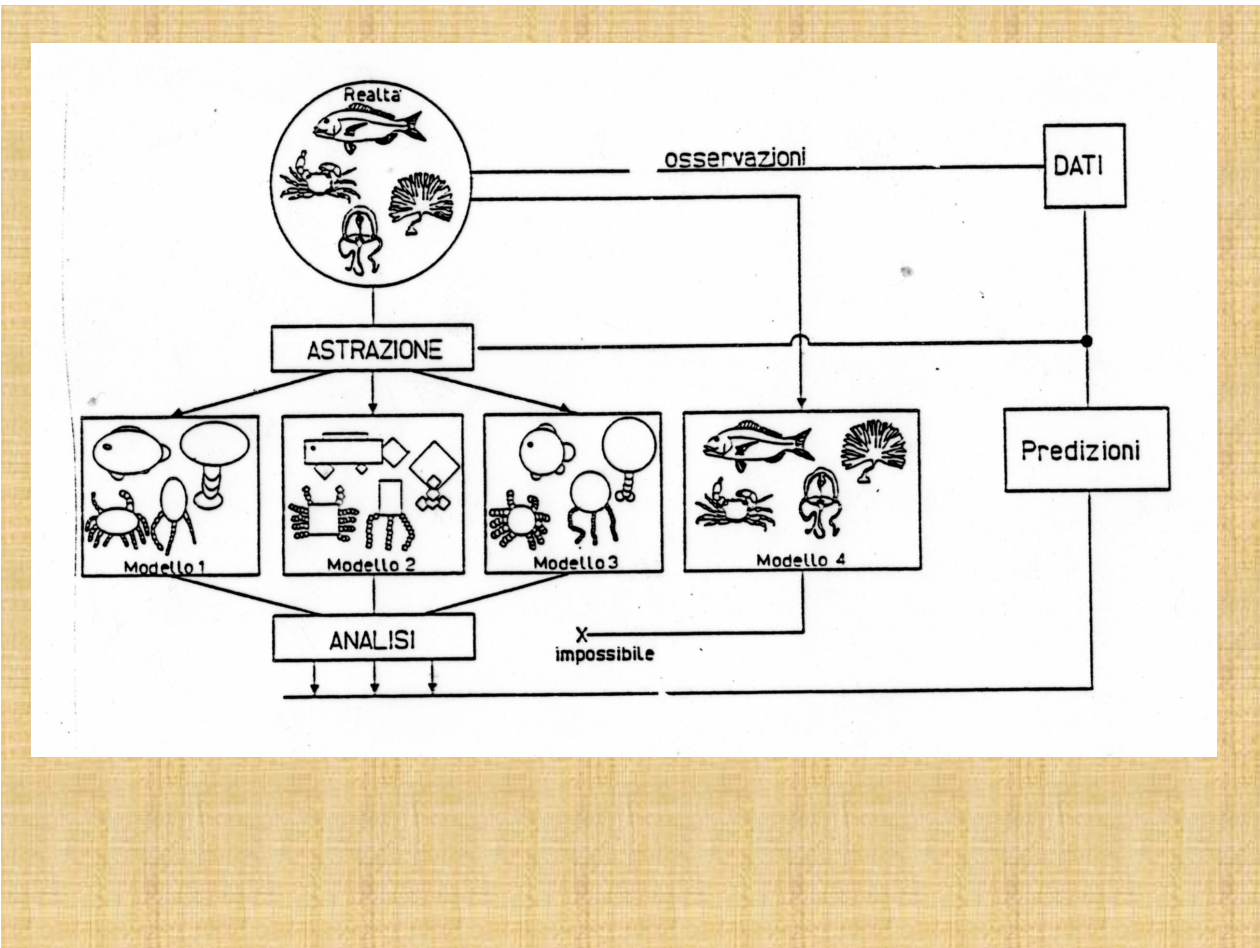
Roma, Sala G. Medici – FIDAF Via Livenza, 6



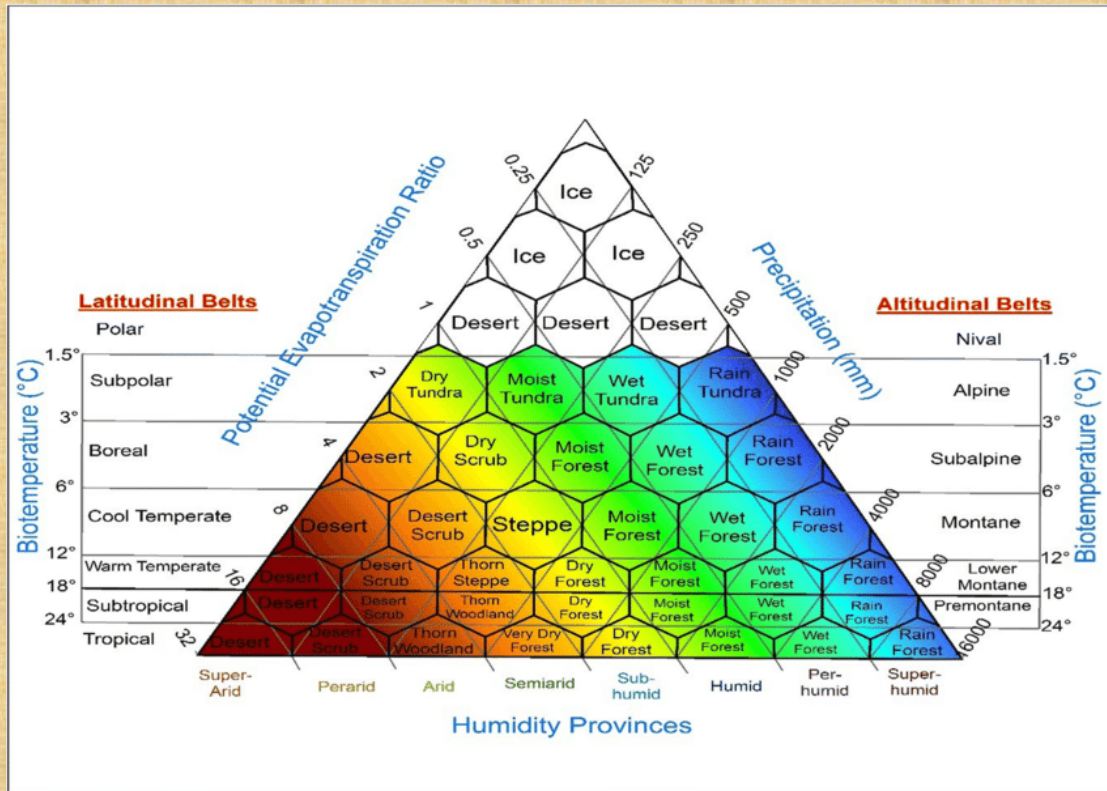
*Prof. Giuseppe Lo Paro*  
*Istituto Nazionale Bioarchitettura*

### Condizioni climatiche ed ecosistemi

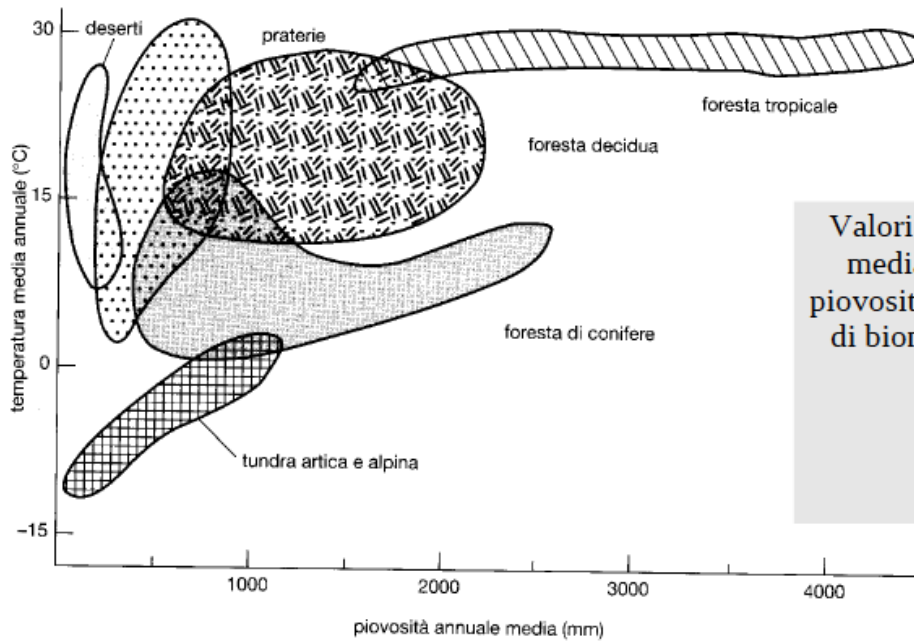




(Whittaker R.H, 1975)

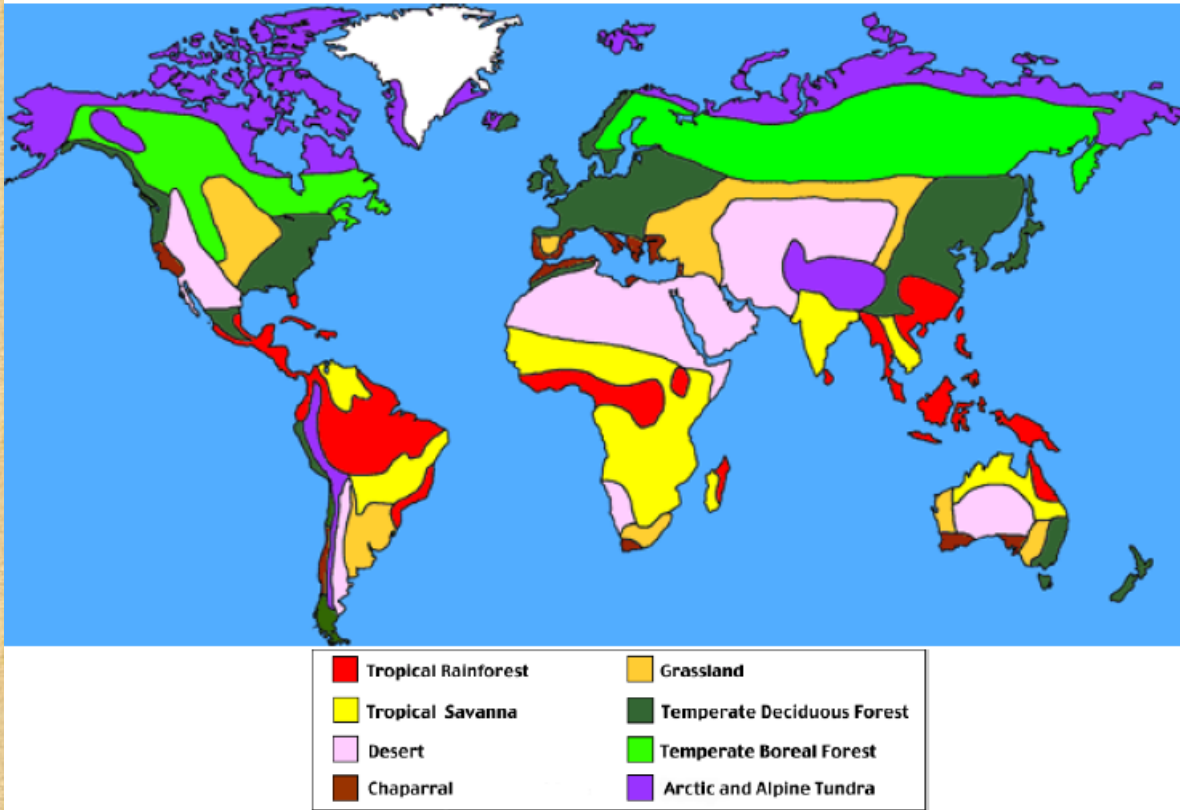


Holdridge-life-zones (1971)



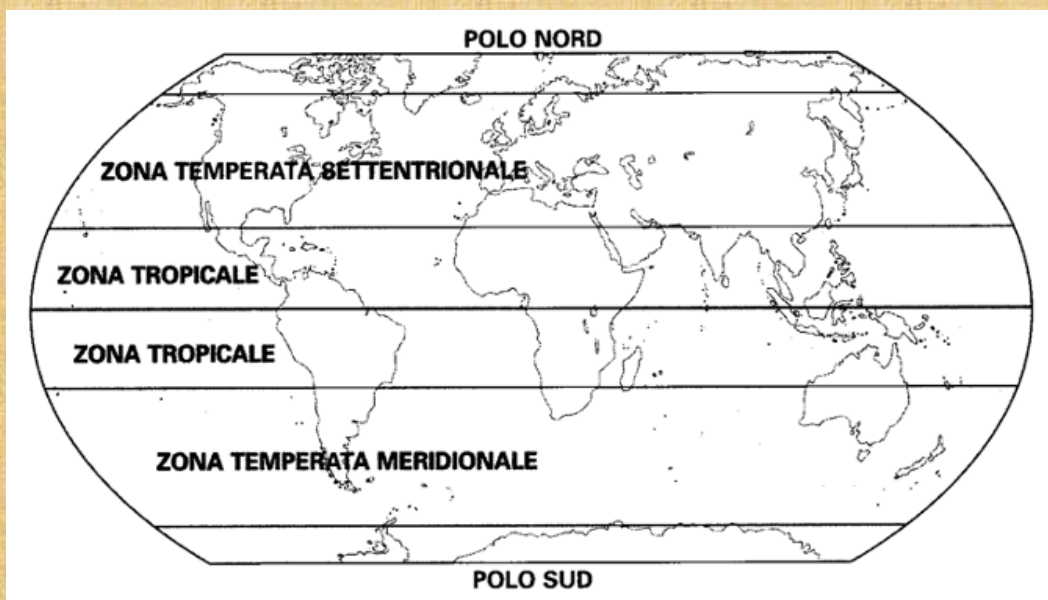
Valori di temperatura media annuale e di piovosità per diversi tipi di biomi (da Pignatti, 1995)

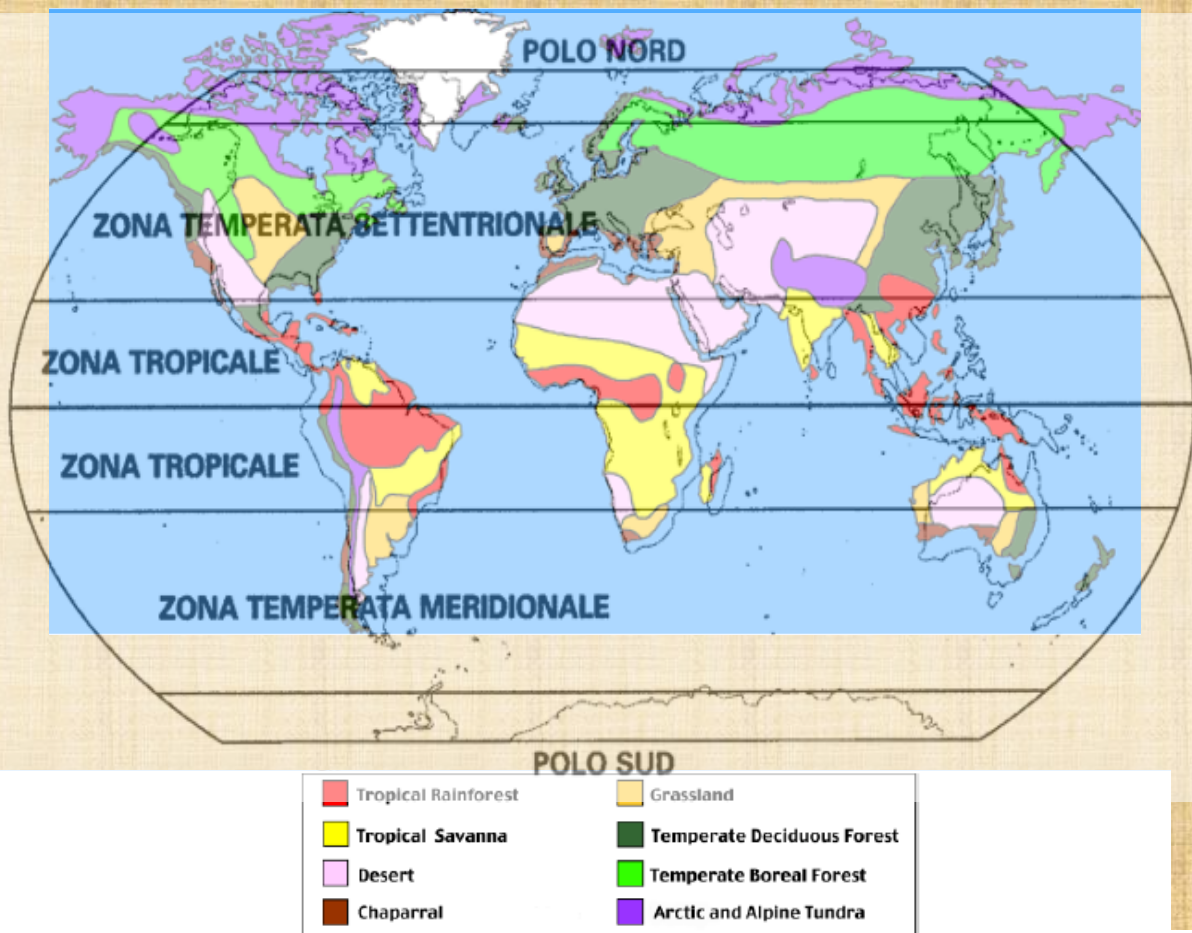
## I biomi



## Zone climatiche

Le zone climatiche sono determinate dalla latitudine, dall'inclinazione dell'asse terrestre e dalla diversa insolazione che ricevono le zone della terra

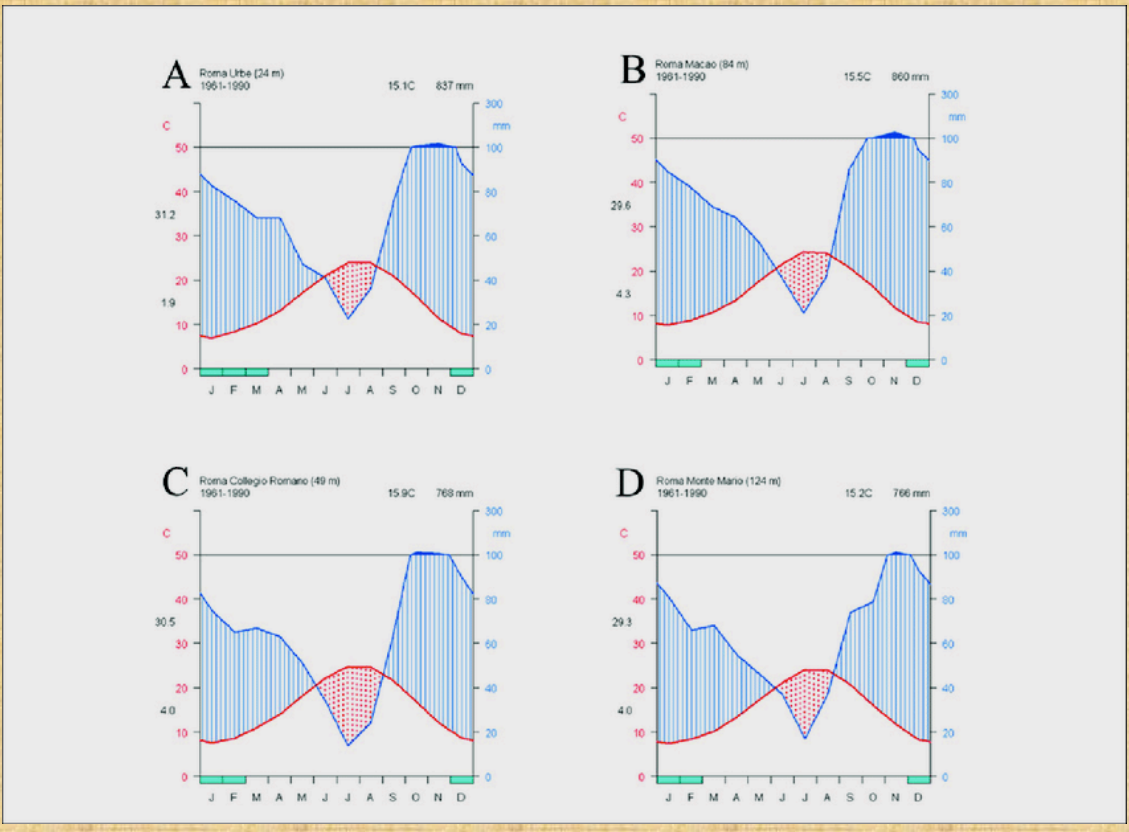
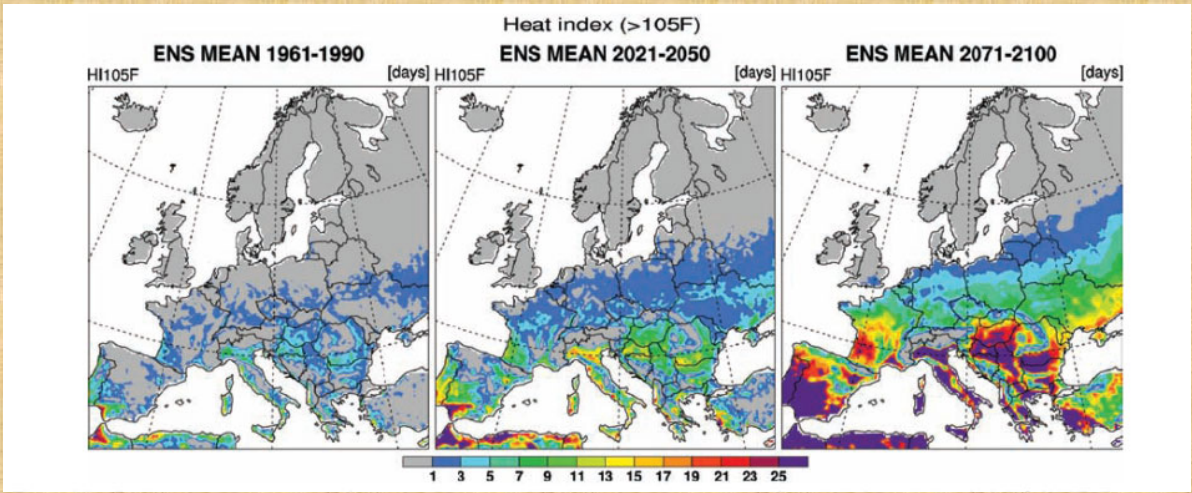


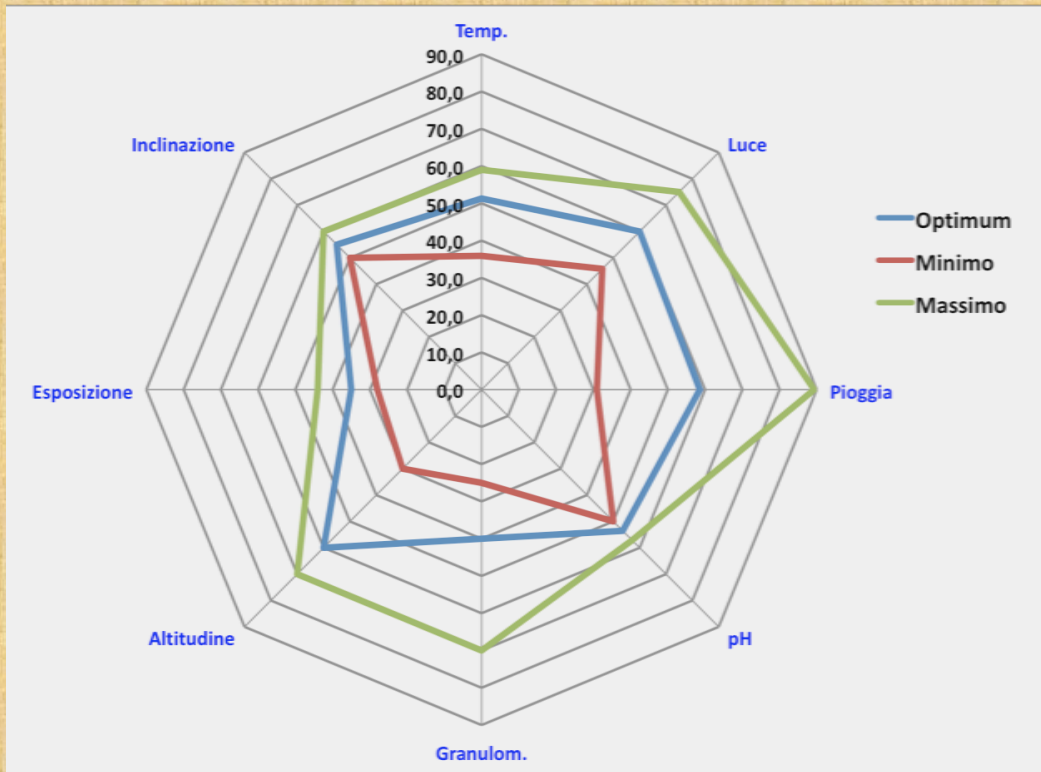
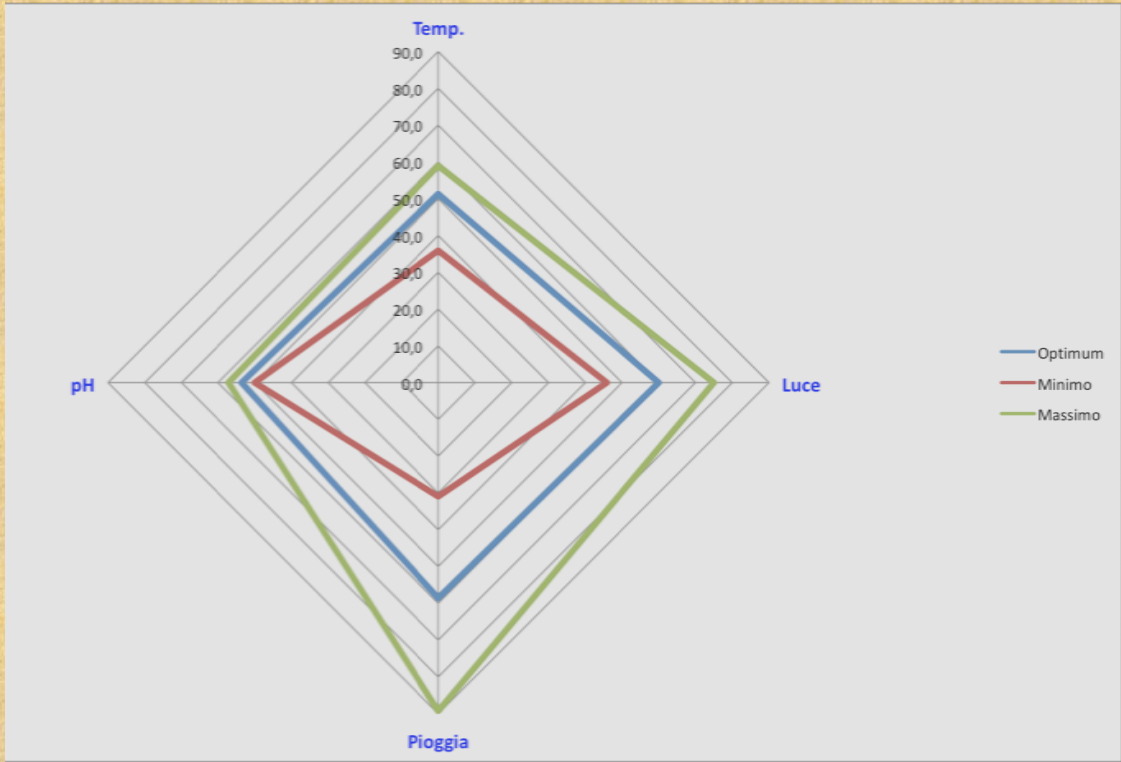


## I biomi terrestri

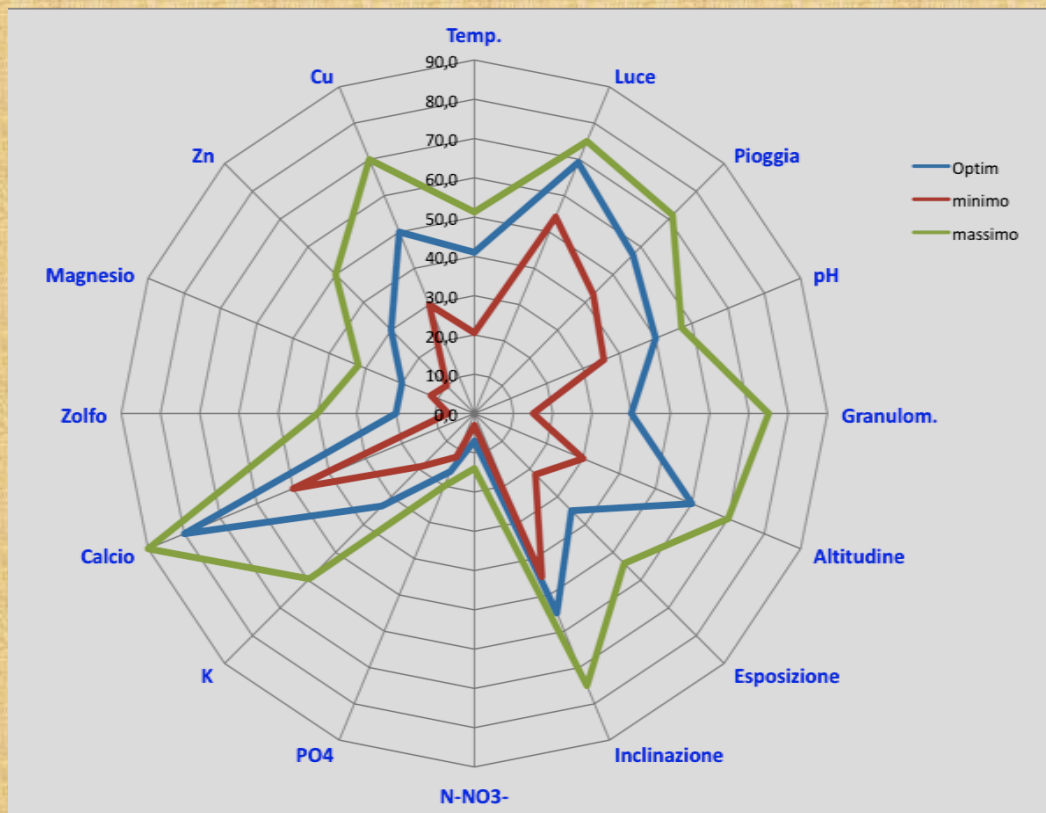
- Bioma polare
- Tundra
- Taiga
- Steppa fredda
- Foresta decidua
- Prateria temperata
- Macchia mediterranea (chaparral)
- Savana o prateria tropicale
- Steppa tropicale
- Deserto
- Foresta pluviale equatoriale





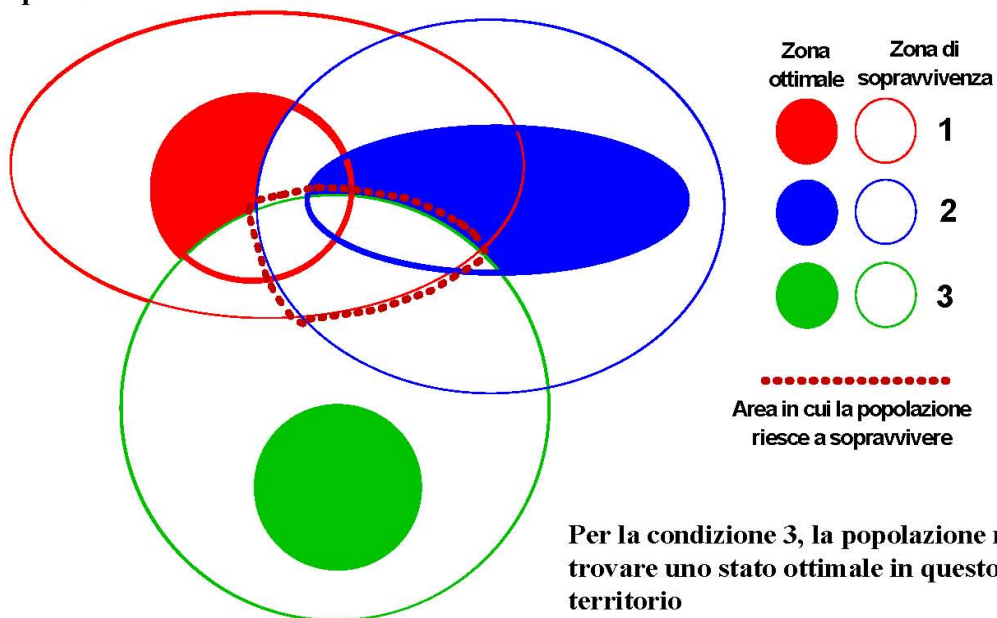






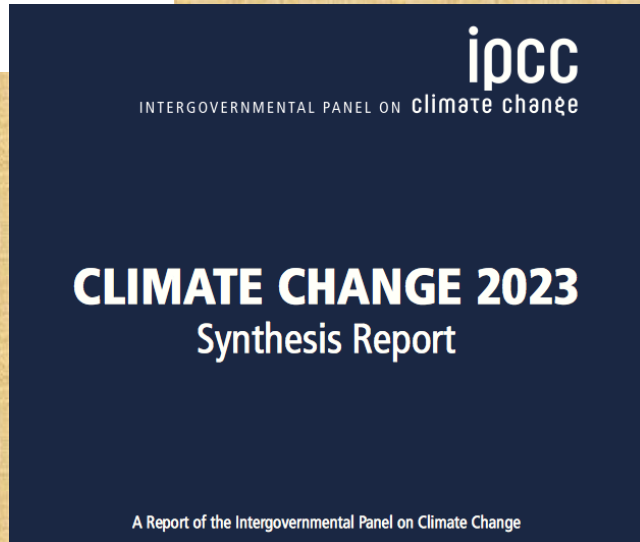
### E' sempre possibile scegliere le condizioni ottimali?

Esempio di tre condizioni ambientali (1, 2, 3) diversamente distribuite sul territorio. La popolazione troverà condizioni di sopravvivenza solo in una piccola area.



# Synthesis Report of the Sixth Assessment Report

A Report of the Intergovernmental Panel on Climate Change



## c) Observed impacts and related losses and damages of climate change

		Global	Africa	Asia	Australasia	Central & South America	Europe	North America	Small Islands
<b>HUMAN SYSTEMS</b>	<b>Water availability and food production</b>	Physical water availability	***	**	**	**	**	**	**
		Agriculture/crop production	**	***	***	***	**	**	**
		Animal and livestock health and productivity	**	*	*	**	**	**	**
		Fisheries yields and aquaculture production	**	**	**	**	**	**	**
<b>Health and wellbeing</b>	Infectious diseases	Heat, malnutrition and harm from wildfire	***	***	***	**	**	***	**
		Mental health	***	-	***	**	/	***	***
		Displacement	***	***	***	/	**	***	***
<b>Cities, settlements and infrastructure</b>	Inland flooding and associated damages	Flood/storm induced damages in coastal areas	***	**	*	*	**	**	***
		Damages to infrastructure	***	**	**	***	**	**	***
		Damages to key economic sectors	***	***	**	***	**	**	***
			***	***	**	***	**	**	***
<b>ECOSYSTEMS</b>	<b>Changes in ecosystem structure</b>	Terrestrial	***	***	***	***	***	***	***
		Freshwater	***	***	**	-	***	***	***
		Ocean	***	***	***	***	***	***	***
	<b>Species range shifts</b>	Terrestrial	***	***	*	***	***	***	***
		Freshwater	***	-	**	-	***	***	***
		Ocean	***	***	-	***	***	***	***
	<b>Changes in seasonal timing (phenology)</b>	Terrestrial	***	-	*	***	-	***	***
		Freshwater	***	*	*	-	-	***	***
		Ocean	***	*	**	*	*	***	***

**Dimension of Risk:** Impact

**Key**

**Increased climate impacts**

**HUMAN SYSTEMS**

- Adverse impacts
- Adverse and positive impacts

**ECOSYSTEMS**

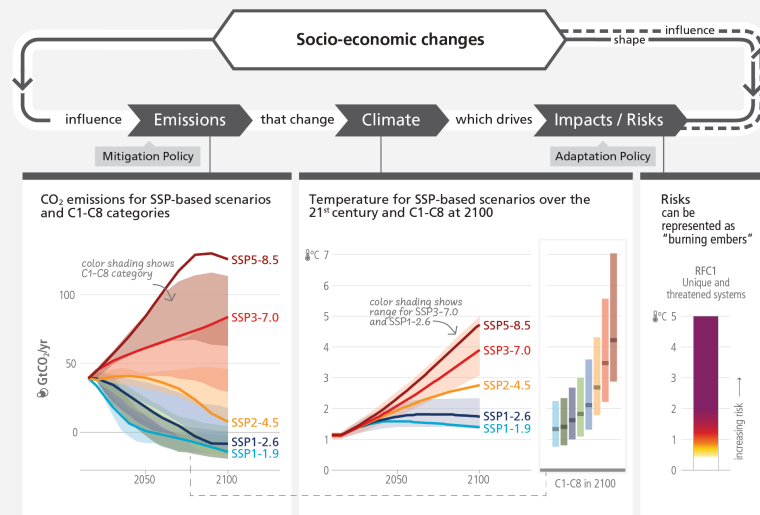
- Climate-driven changes observed, no assessment of impact direction

**Confidence in attribution to climate change**

- \*\*\* High or very high
- \*\* Medium
- \* Low
- Evidence limited, insufficient
- / Not assessed

## Scenarios and warming levels structure our understanding across the cause-effect chain from emissions to climate change and risks

a) AR6 integrated assessment framework on future climate, impacts and mitigation



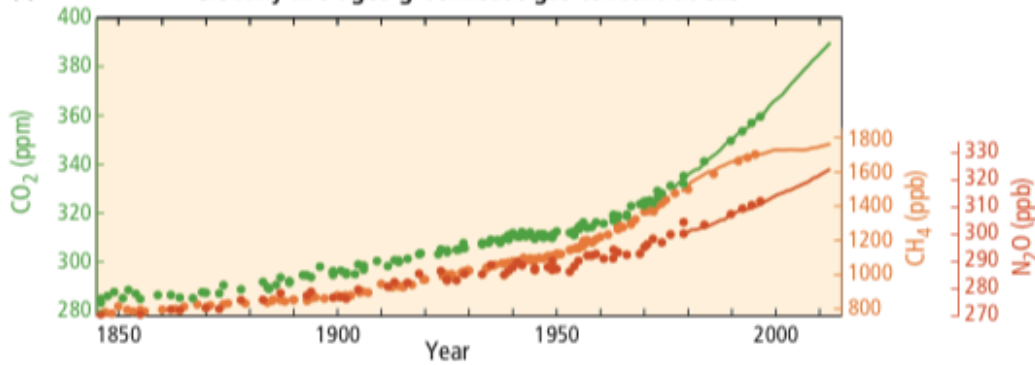
b) Scenarios and pathways across AR6 Working Group reports

Category in WGIII	Category description	GHG emissions scenarios (SSPx-y*) in WGI & WGII	RCPy** in WGI & WGII
C1	limit warming to 1.5°C (>50%) with no or limited overshoot	Very low (SSP1-1.9)	
C2	return warming to 1.5°C (>50%) after a high overshoot		
C3	limit warming to 2°C (>67%)	Low (SSP1-2.6)	RCP2.6
C4	limit warming to 2°C (>50%)		
C5	limit warming to 2.5°C (>50%)		
C6	limit warming to 3°C (>50%)	Intermediate (SSP2-4.5)	RCP 4.5
C7	limit warming to 4°C (>50%)	High (SSP3-7.0)	
C8	exceed warming of 4°C (>50%)	Very high (SSP5-8.5)	RCP 8.5

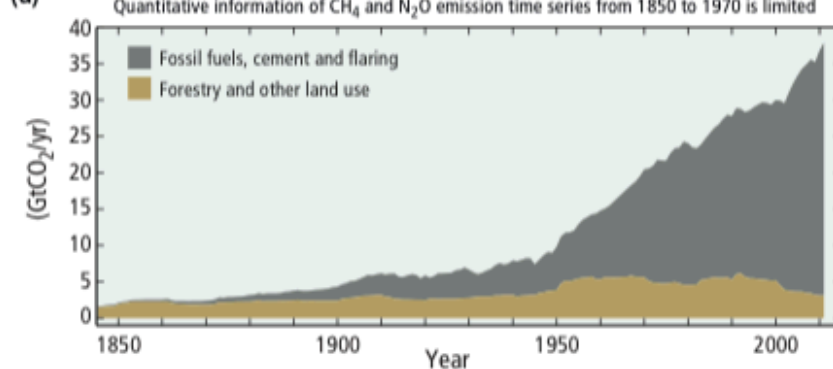
c) Determinants of risk



### (c) Globally averaged greenhouse gas concentrations



### (d) Global anthropogenic CO<sub>2</sub> emissions



### Cumulative CO<sub>2</sub> emissions

