

From Wild to Tame – and Back Again

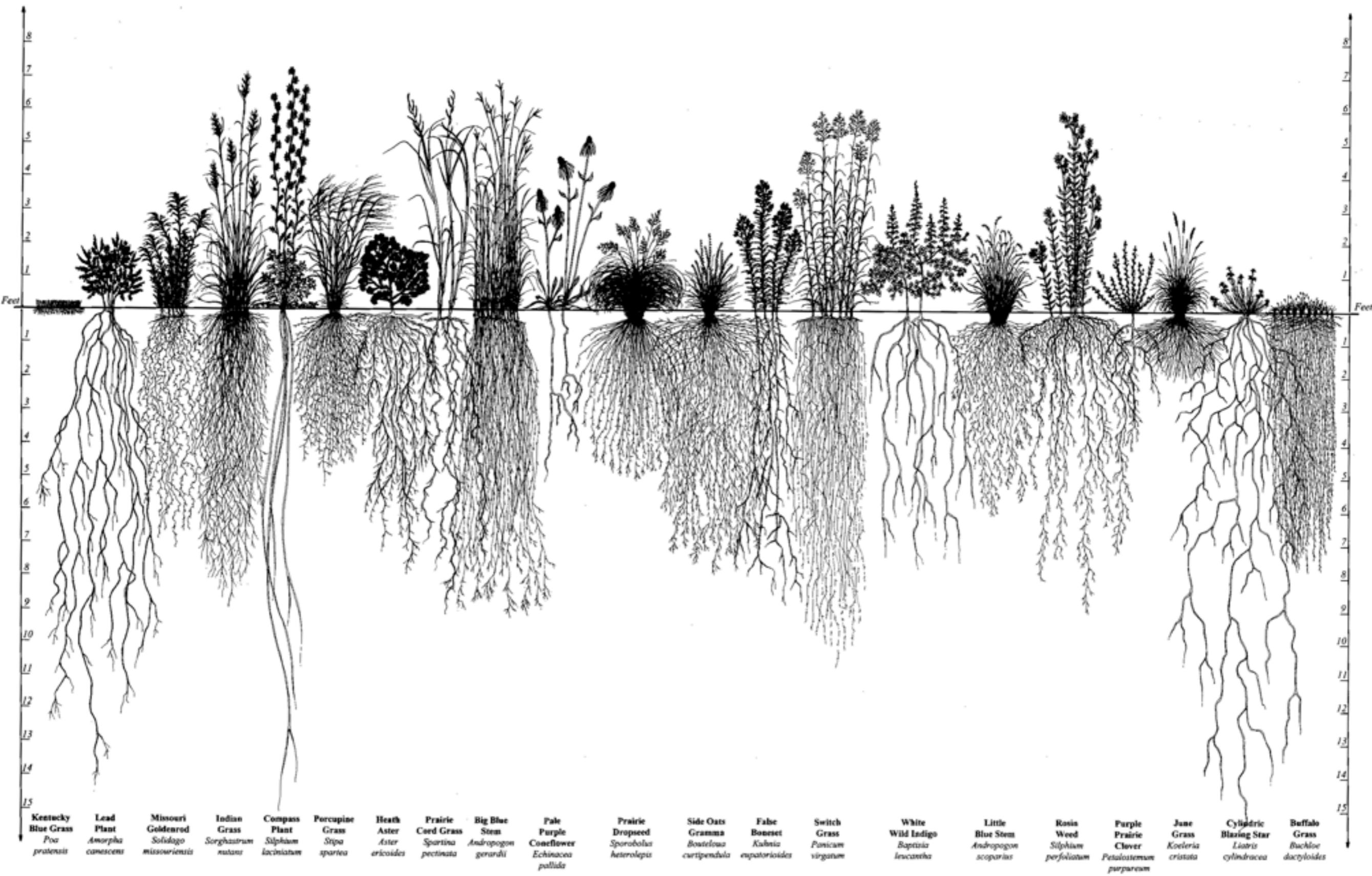
Tor Nørretranders

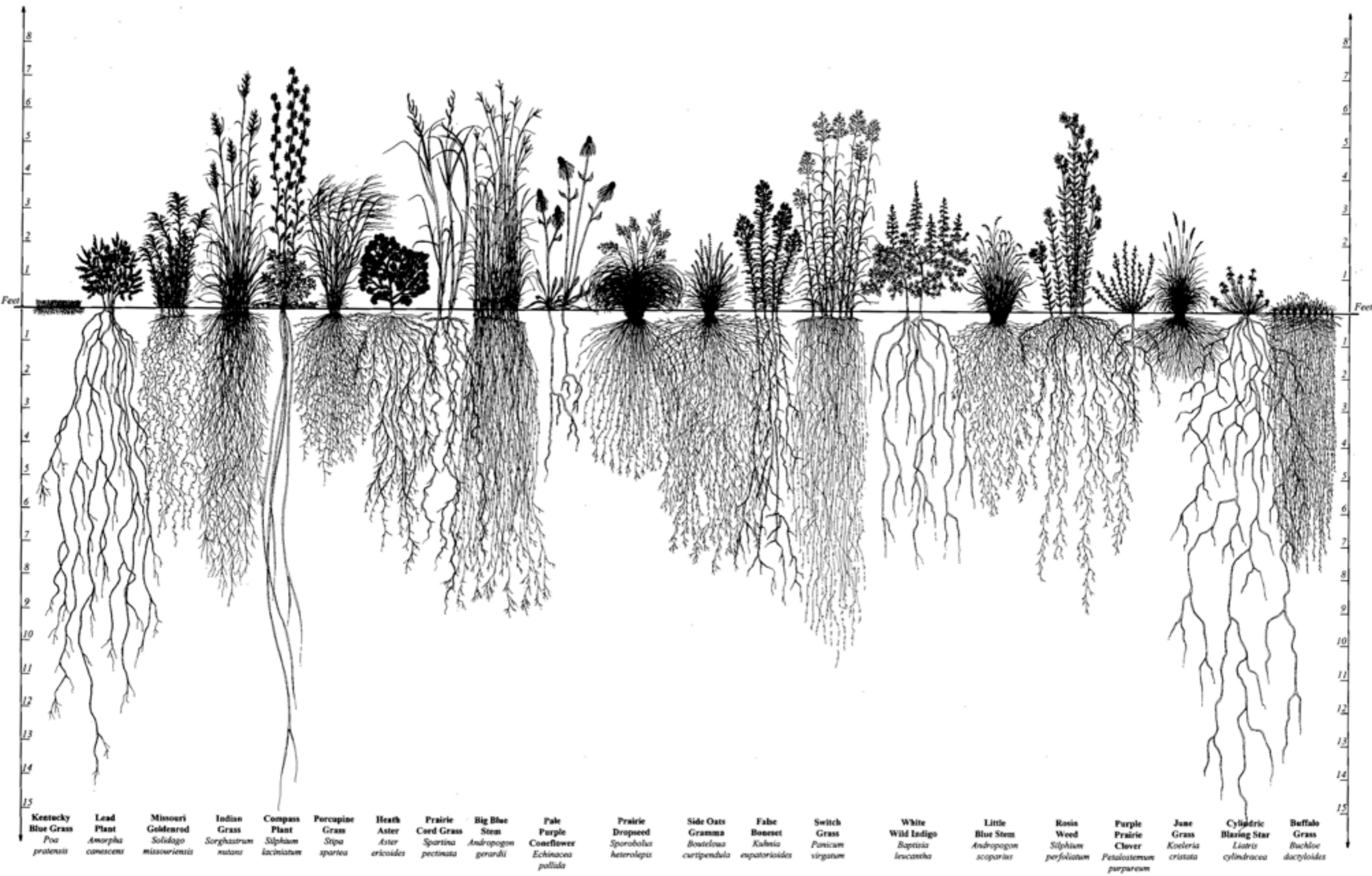
MAD Foodcamp Symposium
Refshaleøen, København

August 27, 2011

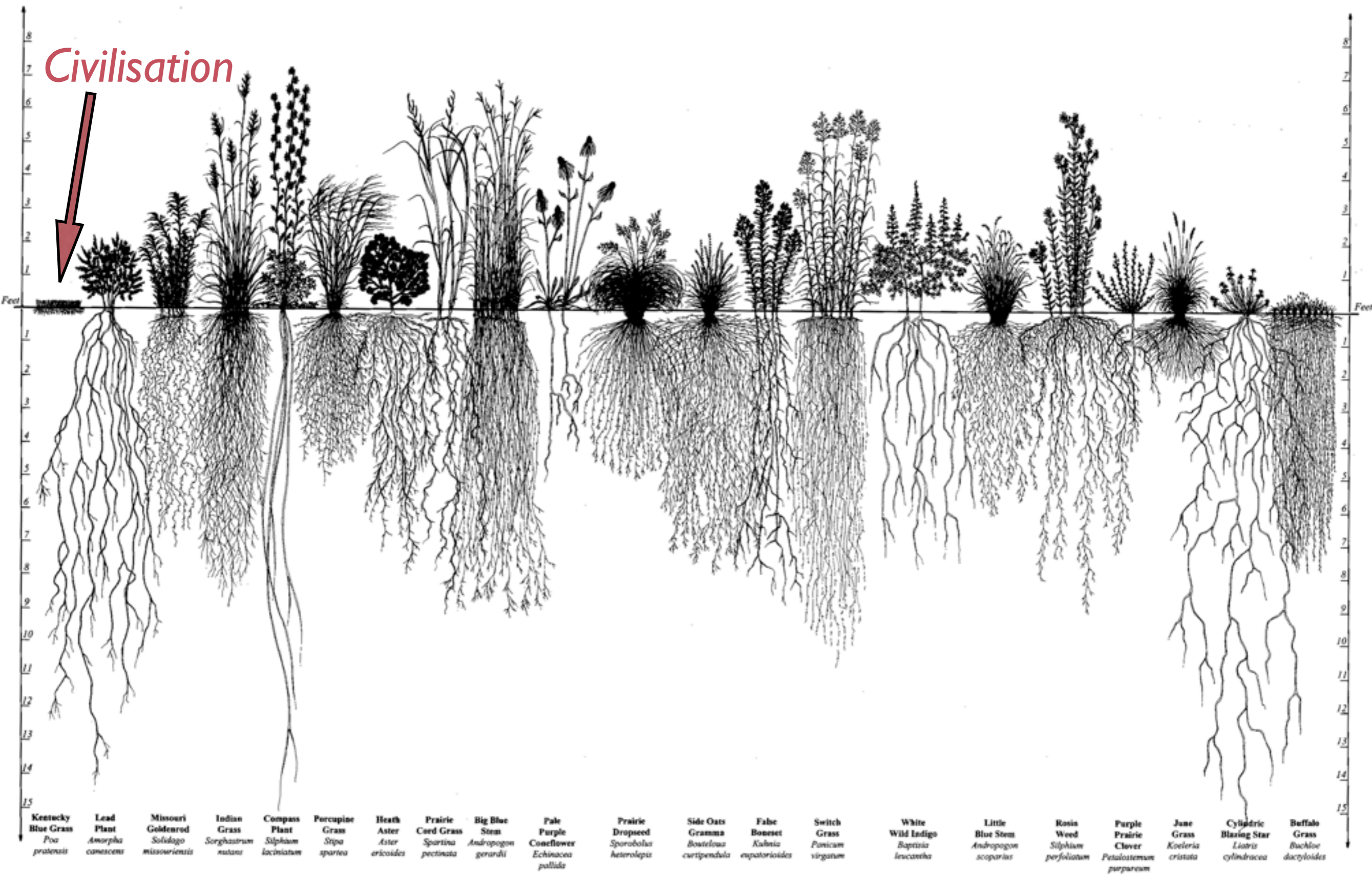
First

Vegetation





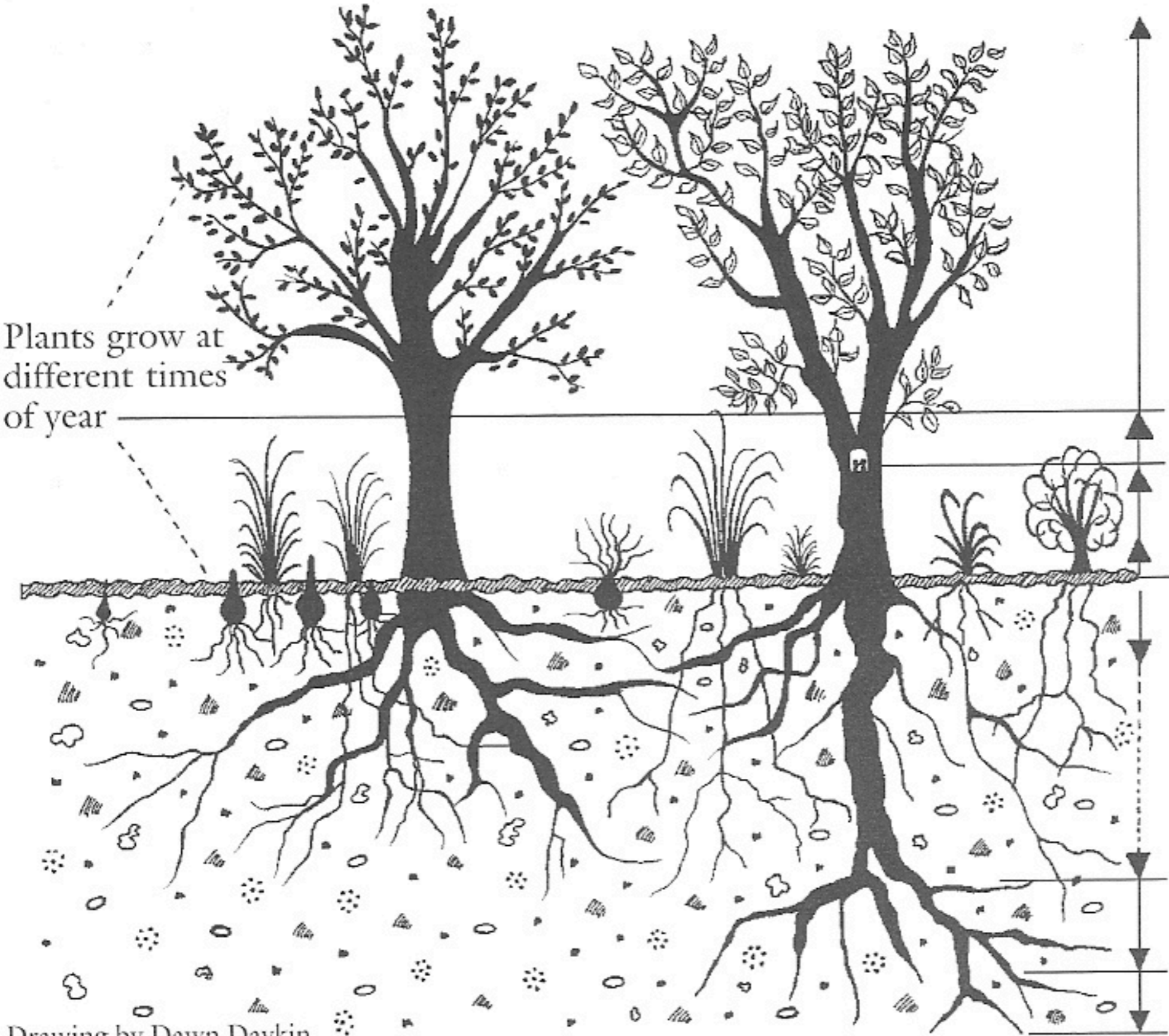
Civilisation



- Kentucky Blue Grass**
Poa pratensis
- Lead Plant**
Amorpha canescens
- Missouri Goldenrod**
Solidago missouriensis
- Indian Grass**
Sorghastrum nutans
- Compass Plant**
Silphium laciniatum
- Porcupine Grass**
Stipa spartea
- Heath Aster**
Aster ericoides
- Prairie Cord Grass**
Spartina pectinata
- Big Blue Stem**
Andropogon gerardi
- Pale Purple Coneflower**
Echinacea pallida
- Prairie Dropseed**
Sporobolus heterolepis
- Side Oats Gramma**
Bouteloua curtipendula
- Fabe Boneset**
Kuhnia eupatorioides
- Switch Grass**
Panicum virgatum
- White Wild Indigo**
Baptisia leucantha
- Little Blue Stem**
Andropogon scoparius
- Rosin Weed**
Silphium perfoliatum
- Purple Prairie Clover**
Petalostemon purpureum
- June Grass**
Koeleria cristata
- Cylindric Blazing Star**
Liatris cylindracea
- Buffalo Grass**
Buchloe dactyloides

Superficial civilisation

Typical Woodland Environment



Plants grow at different times of year

Habitats for wildlife encourage biodiversity

Nutrients from decaying material are reabsorbed

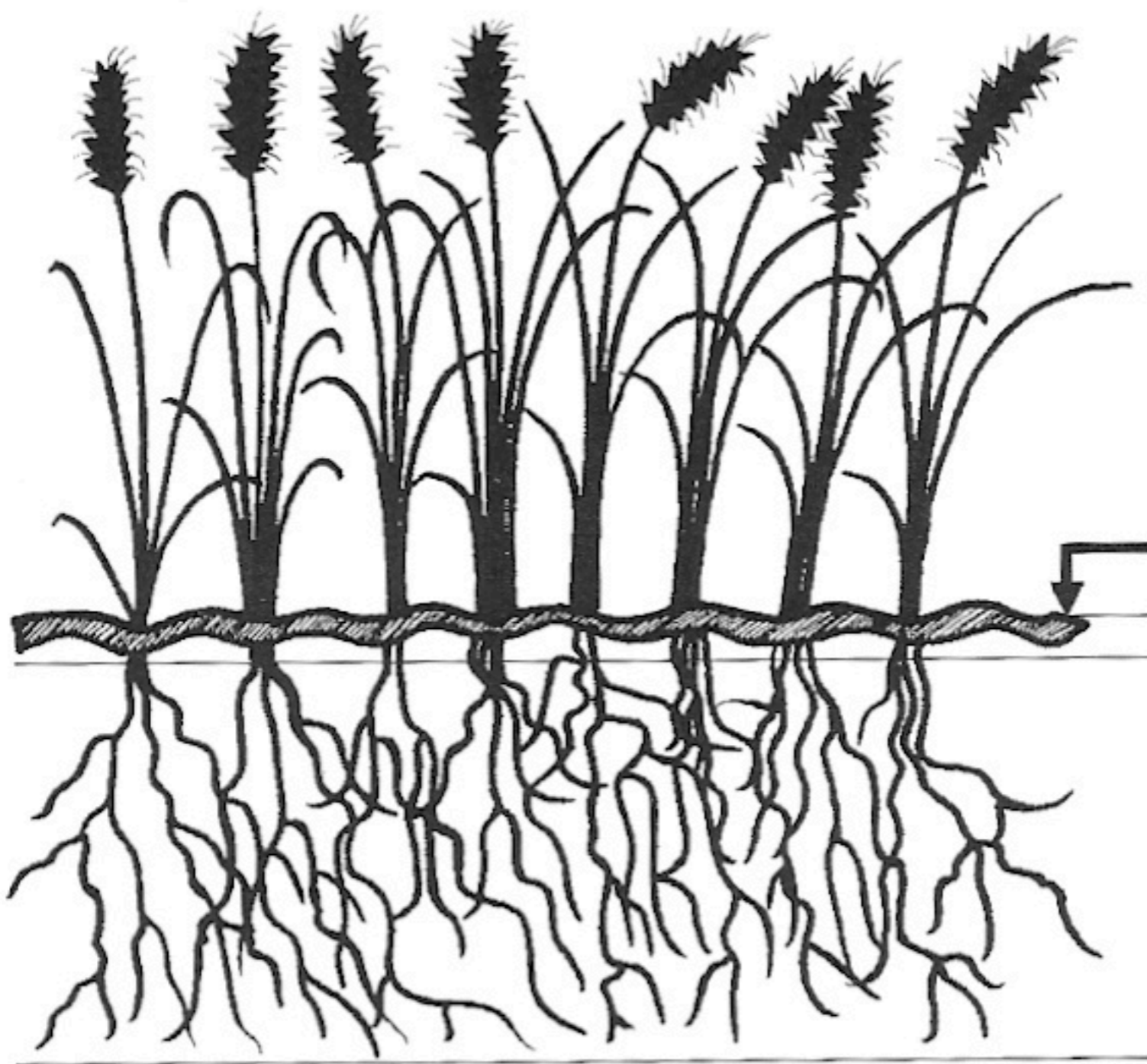
Plant roots draw nutrients from a wide range of depths

Drawing by Dawn Daykin

Typical Monoculture Environment

All plants grow to similar height at the same time

Exposed soil is lost by erosion



Ground level

All roots occupy similar depths

Nutrients here are less accessible to plants

Leached nutrients become pollutants

Drawing by Dawn Daykin

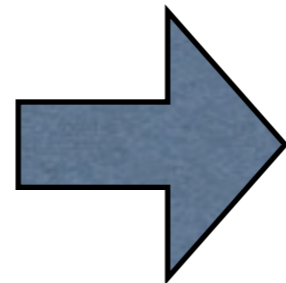
Nature is diverse

**Civilisation is
monotonous**

why?

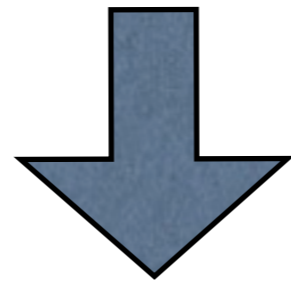
10.000 years ago:

Hunter-gatherers



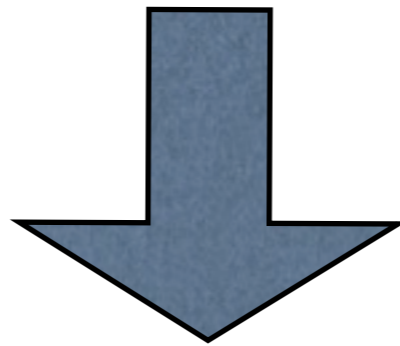
Farmers

**Manifold of
fish, animals and plants**



**Very few
fish, animals and plants**

Wild



Tame

Domestication

Plants domesticated into cultivated plants

Animals tamed and domesticated

Strategy:
Catastrophology

The

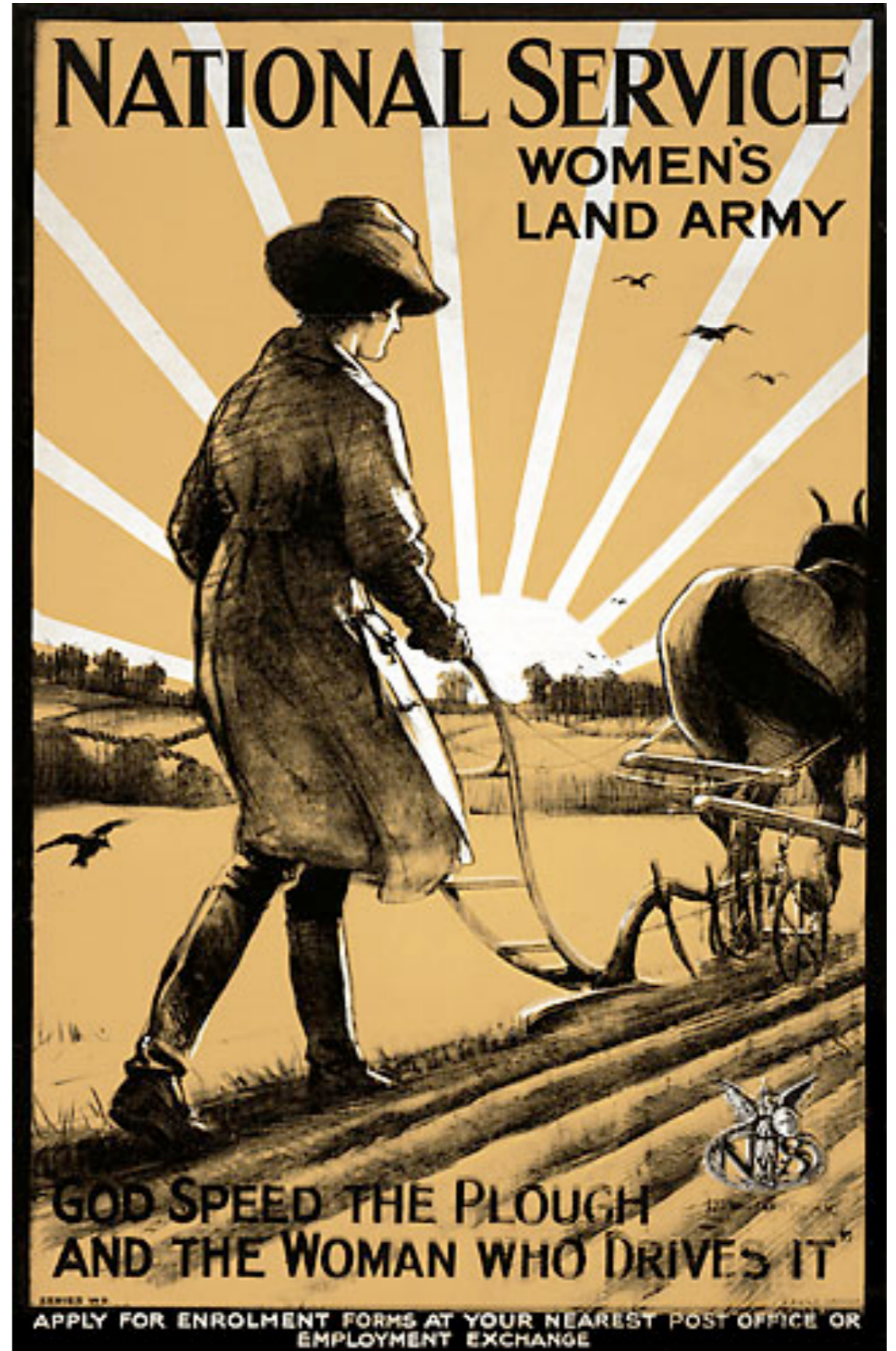
Plow



-1800



- 1200



WWI

**The plow: The creation of a
recurring annual catastrophe**

Get rid of all optimistic plants!

**Only allow that
which we want**

Annuaals

FAO:

**60 % of the calories
consumed by human beings
come from only four crops:
*rice, wheat, corn and potatoes***

90% from just 30 crops

The sad story of vegetation and gastronomy

1. We eat so few plants

2. Your skills are used mostly
in making a few dull things
somewhat varied and interesting.

All gastronomy
has been about
making something
poor seem rich

Food from annuals
gives a fast increase
in blood sugar levels

- starchy
- no bran
- quick satisfaction
- quick hunger again

Diseases of civilisation

Circulatory
Diabetes
Obesity

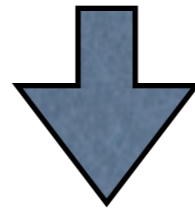
Second

S.O.S.

Soiil

Between heaven and earth:

Plants eating sunlight



Soil



Rocks eroding

To plow is to rape the soil

**Dust bowls
Nutrient scarcity
Compacting**

David Montgomery's calculation:

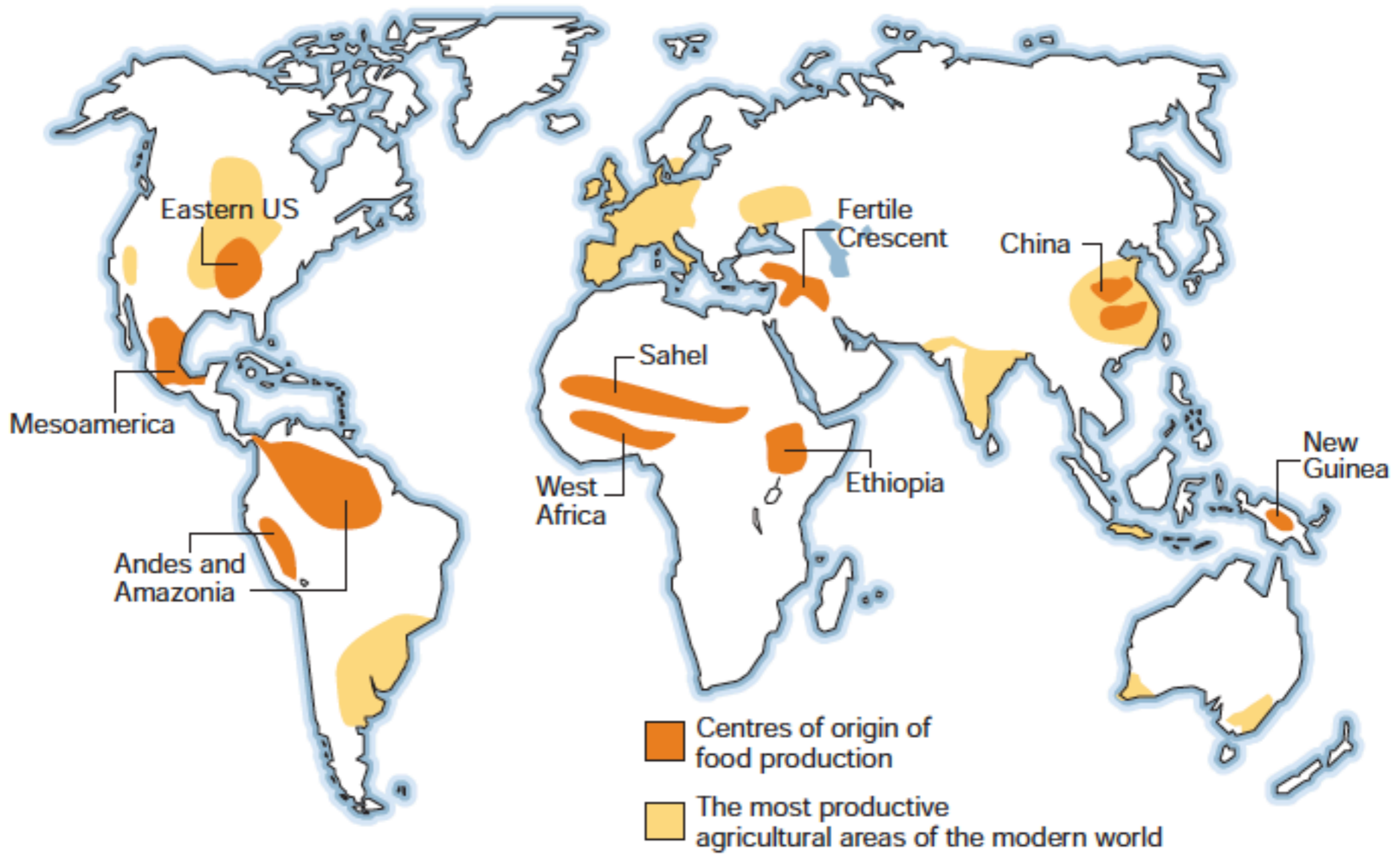
1 meter soil

1 mm per year

1000 years

Soil is mined away and civilisations fall

Mayas, inkas, greeks, romans,
Mesopotamia, Sahel, China ...



**1000 year lifetime
for civilisations?**

**1000 year lifetime
for civilisations?**

+ fertilizers!

Tokyo 1649:

**Banning urine and faeces
in the rivers and canals**

The hospitality of chinese peasants

**We do not return the atoms
to the soil
when we do agriculture
based on monocultures**

Recycle the soil

Recirculate nutrients from the soil:

- rotate crops
 - night soil
- animal fertilizer
- chemical fertilizer

Degradation of soil

⇒

Fertilizers like NPK

Climimate

**The end of fossil fuels
is also the end of
chemical fertilizers**

The End of Annuals + Fossil fuel

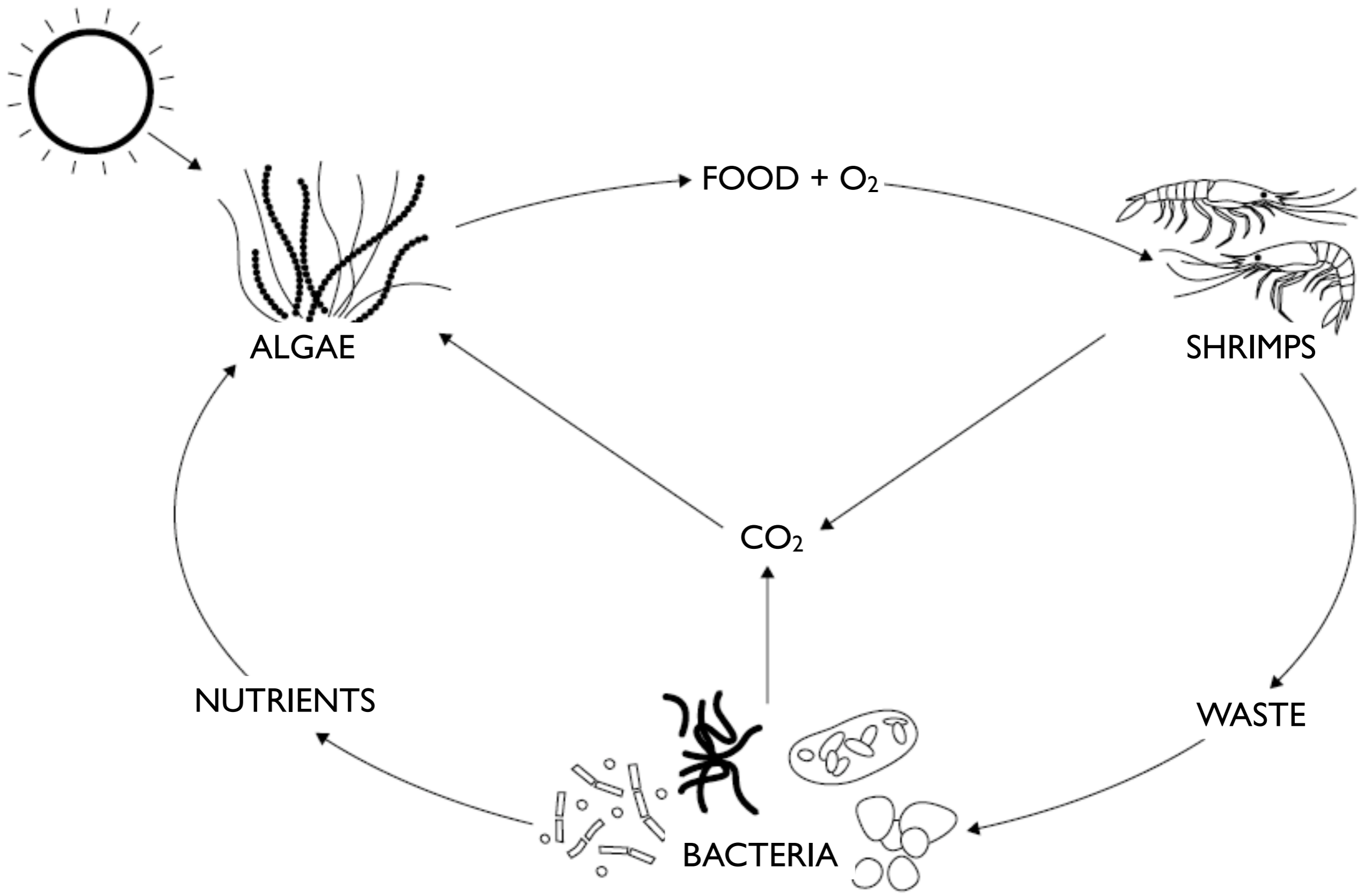
Save our Soils

Third

Flow



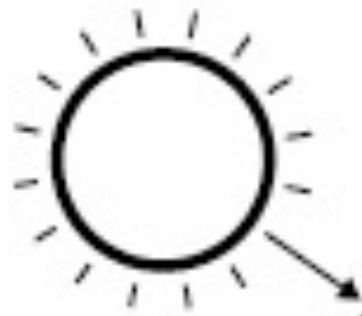
Ecosphere



Waste = Food

Share your shit!





PLANTS

FOOD+O₂

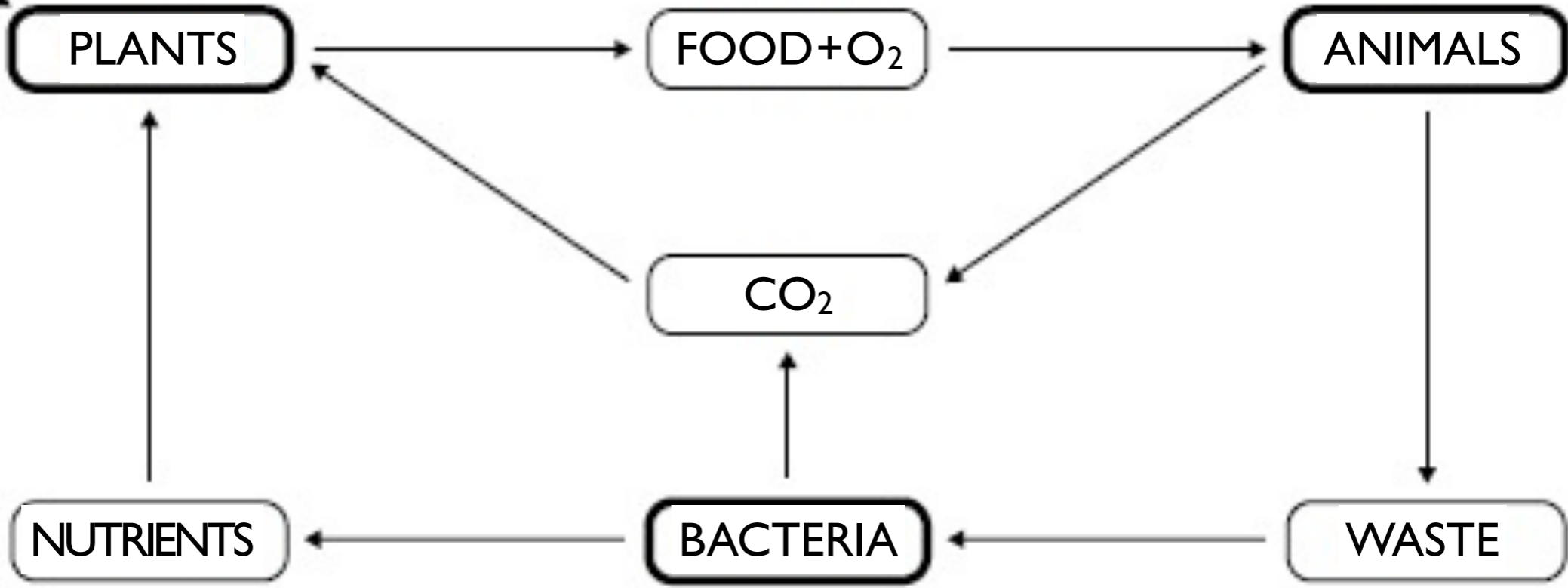
ANIMALS

NUTRIENTS

BACTERIA

WASTE

CO₂



Flow

of matter in a closed loop

Life is flow

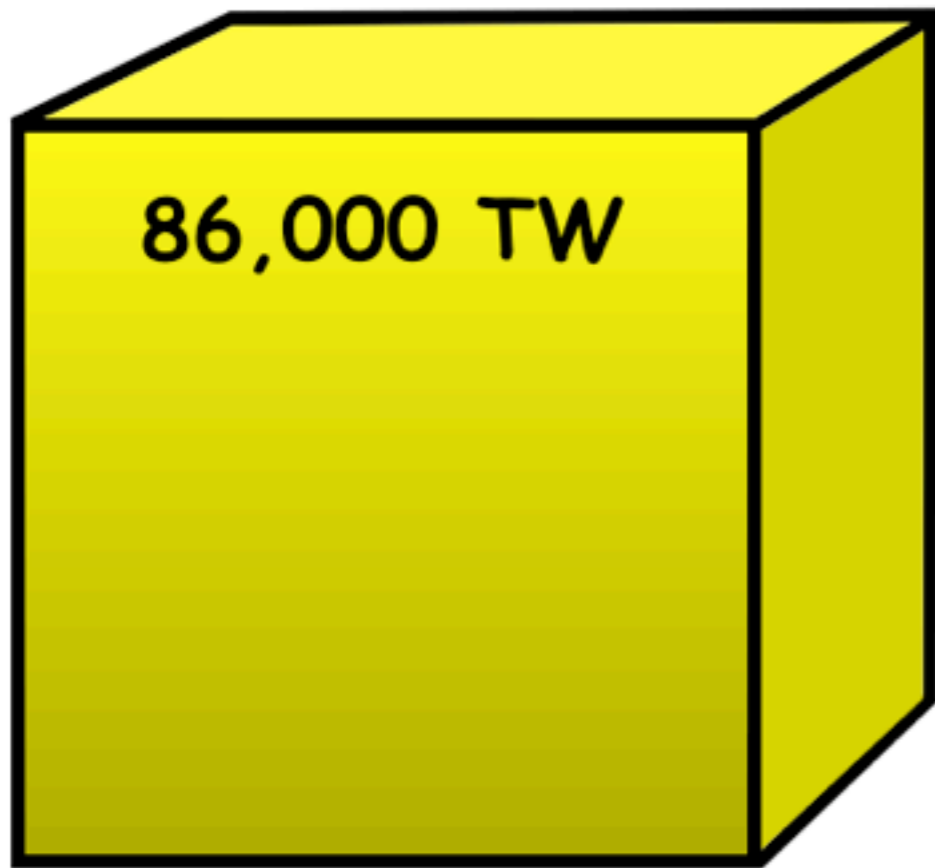


Ecosphere



Just add

daylight



Solar

7.2 TW



Hydro

870 TW



Wind

32 TW



Geothermal

15 TW



**Global
Consumption**

Flow

Depot

Solar, wind, wave

Fossil sources

Biomass,
Photosynthesis

Nuclear

We are in a crisis
We stop the flow

**Civilisation as we know it:
Depots from the planet below**

**Civilisation as we have to invent it:
Flow from the star above**

Climimate

CO_2

Carbon

Agriculture is the most important source of greenhouse gases

| | |
|-----------------|---------|
| Historical time | 320 GtC |
| Industrial time | 136 GtC |
| Fossil fuels | 270 GtC |

Flow

Fourth

Reincarnation

We are flows

1.5 ton of matter
goes through
each of us
every year

**98% of our atoms
are replaced in a year**

Permanent reincarnation

Digital media: Never lose the information

We are not things

Things

Flows

| Things | Flows |
|--------|-------|
| | |
| | |
| | |

Things

Flows

Diamond

Flame

| Things | Flows |
|----------------|--------------|
| Diamond | Flame |
| | |
| | |

Things

Flows

Diamond

Flame

Rock

River

Things

Flows

Diamond

Flame

Rock

River

Chair

Chef

**The flow
must go on**

No security from depots

Security from having
trust in the planet

**Food for 9 billion people
- healthy to both
persons and the planet**

Fifth

Wilderness

Why not eat what is already there?

Why not eat what is already there?

The wWild

Wild food

Perennial plants

How much wild food is there in the world?

How much wild food is there in thw world?

Nobody knows!

10000 years ago:

The choice made was
to substitute
the diversity of nature
with only the plants
man could control

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They were stone agers!

| Hunter-gatherer | Agriculture classic | Agriculture industrial |
|-----------------|---------------------|------------------------|
| Many kinds | Few kinds | All corn |
| Solar power | Solar & human power | Fossil power |
| Healthy | Hard | Unhealthy |

Hi Tech stone age:

The wild
rediscovered

The wild
made edible

**Wild = having
it's own will**

Outside human intention

Not anyone's

No-man's-land

Finally

Gastronomy

***Gastro-
nauts!***

**Is it friendly out there?
Is the Earth edible?**

We trust the planet

We go with the flow

Explore & Investigate

Re-Search

Re-Spect

Re-Store

Re-Staurant

Noma's Ark

**We are natives
coming back
to the wild**