



# Complete Plant Health (CPH)

**“We have killed off nature-that world entirely independent of us which was here before we arrived”**

**Bill McKibben, The End of Nature**

# CPH

“An alternative to Integrated Pest Management (IPM)”



# [ Complete Plant Health ]

---

- Sensible approach to how we garden
- Involves a series of steps or considerations in how we consider our involvement in our gardens development
- Change in attitude
- Economic benefits

Is this lawn getting what it needs?



Is this lawn getting what it needs?





# [ The Sensible Approach-CPH ]

**“Consider the needs of the plant, not the needs of the gardener”**

**Michael Pascoe**



# [ A thirsty tree! ]

- One large tree on an average summer day (70 F) expels how much water through transpiration?



# [ A thirsty tree! ]

- Over 150 gallons





# Consider the needs of the plant first.

- Will the plant do what it needs to do in that particular location
- Are the conditions suited for its proper growth
- Will the plant suffer from pest infestations
- Is it compatible with it's environment

Who prunes a plant?

**Why?**



# Who prunes a plant?

- Storm damage or other injury
- Disease control
- Rejuvenation
- Hedging



# Will the plant do what it needs to do in its selected location?

“Take a lesson from nature, plants grow where they like because simply; they like it there” Michael Pascoe

- Will the plant accomplish its task or are you forcing it to conform?





# Are the conditions suited for its proper growth?

- Soil
- Water
- Drainage
- Sun/shade ratios  
(full sun, part sun, part shade, full shade)
- Exposure
- Hardiness (the Maladus zoneitest)



# Will the plants suffer from pest infestations?

- Have you selected a potential problem
- Will improper culture of the plant promote other problems
- Is it part of a pest life cycle (junipers and hawthorn)



# Is it compatible with its environment?

- Are you introducing an invasive species
- The Norway Maple is encroaching our natural areas
- It suppresses our native Sugar Maple



# Is the Dandelion a native plant?

- No
- Is Garlic Mustard native?
- No
- Is Buckthorn native
- No





# The Mechanics of good gardening

Soil  
Water  
Mulch  
Education

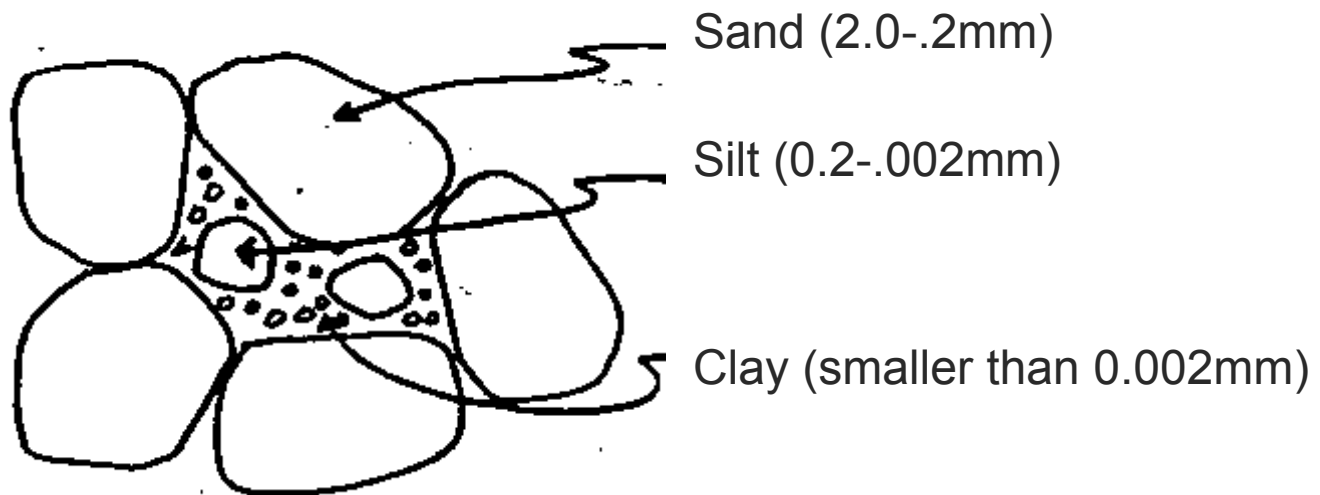




The important ingredients

Soil

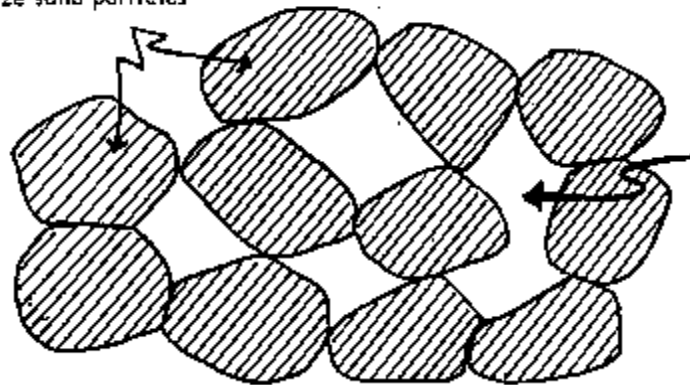
# Understanding soil



# The most important ingredient

## Soil

2.0 to 0.05 mm  
size sand particles

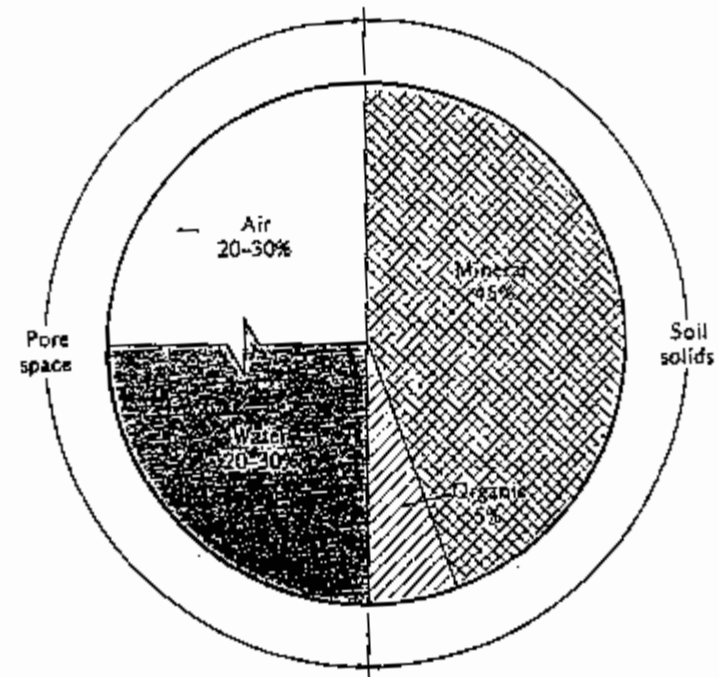


Soil Pore Space



# Soil Composition

- Sand/silt/clay
- Water
- Air
- Organic matter



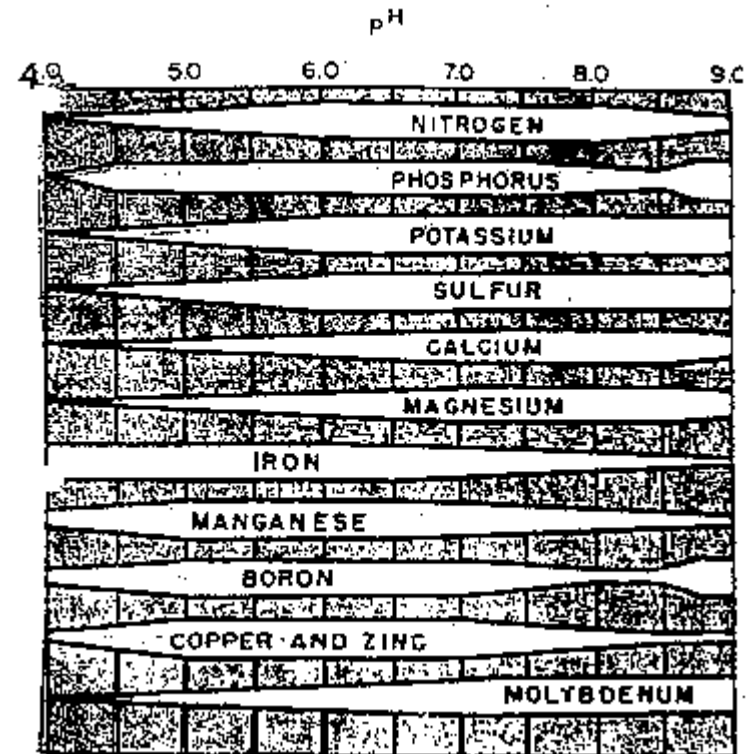
# [ Soil compaction ]

---

- Loss of pore space
- Poor drainage
- Lack of oxygen
- Dying plants

# Soil pH

- The importance of a soil test
- Collecting a representative sample



# [ Soil micro and macro fauna ]

---

- Remember the worms?
- Remember the microbes?



# [ Watering ]

---

- Remember the thirsty tree?
- Deep watering=deep roots
- Deep roots=strong plants

# Mulch

- Use all garden waste
- To compost or not to compost?
- Carbon/nitrogen ratio



# Mulching and adding organic mater: the benefits

- Builds soil texture, binds small soil particles together into larger particles, thereby developing larger pore spaces in the soil.
- Humus can supply most of the micronutrients as well as relatively small quantities of macro nutrients.
- Water percolation is slowed, important in well-drained sandy soils.
- Improves the nutrient hold ability of soils, especially those of a sandy nature.

# Turf care

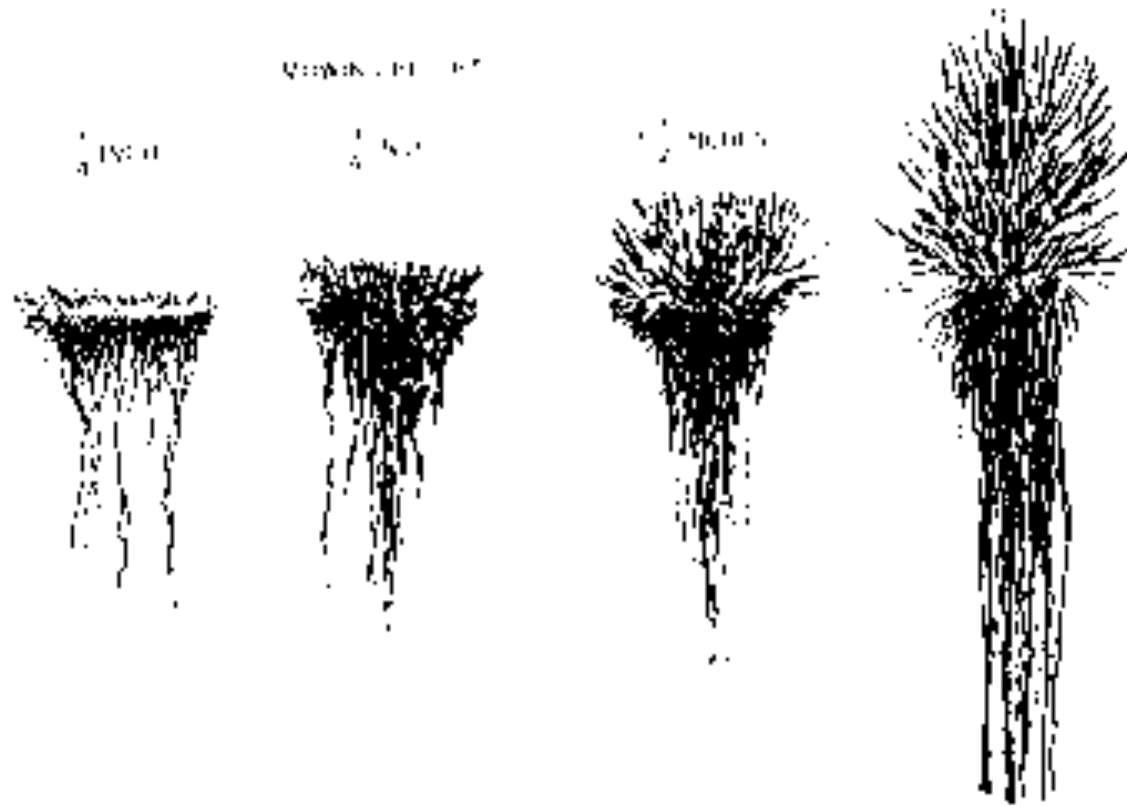
- Fertilizing, why and how.
- Mowing, the procedure.
- Irrigating the lawn.
- Aerating.
- Vertical Mowing or De-thatching.
- Rolling, why not?
- Pest control.



# Fertilizing

- Remember the worms?
- Done in conjunction with other lawn care practices

# [ Mowing: The Procedure ]







## Mowing:

How often do you sharpen  
your mower blade?

# [ Aerating ]

---

- Not often considered necessary
- Should be done at least once a year
- Core aeration is best
- Decreases thatch build-up
- Improves water percolation
- Encourages deep rooting



# De-thatching

If you have done everything right you should not have thatch.



Rolling

How many people  
roll their lawn?



Rolling

No, No, No.



The dandelion is talking to  
you, listen!

Opportunistic species



**“All plants talk!”**

“Educate yourself to listen”

Michael Pascoe



**Beware the ill treated plant!**



Remember, the hazards of gardening are small



[ And large..... ]







“When I come to build my own garden it can scarcely take another form than the one which is a reflection of its maker”  
The Education of a Gardener, Russell Page

