

Temperature

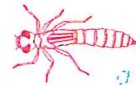
water beetle



Aquatic organisms breathe oxygen that is dissolved in the water.

- Warmer water may mean less dissolved oxygen is available for aquatic animals to breathe.
- Colder water can hold more dissolved oxygen.

Rapid changes in water temperature can kill aquatic organisms.



dragonfly



stonefly



mayfly



caddisfly

°C

°F

Preferred Temperature

50

122

Warm

Above 68° F (20° C)
dragonflies, bass, carp, catfish



40

98.6

Cool

55-68° F (13-20° C)
Chinook, coho, sturgeon,
cutthroat trout, mayflies

mayfly



30

86

20

68

10

50

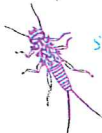
0

32

Cold

Below 55° F (13° C)
Steelhead, caddisflies, stoneflies,
salmon eggs and alevins

stonefly

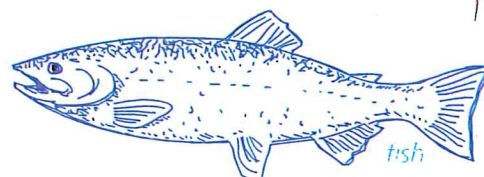


-10

14

-20

0



fish



hellgramite



snail

Dissolved Oxygen (D.O.)

Definition: The amount of oxygen in the water.

Importance: Required by aquatic life to breathe.

How is it measured? In Parts Per Million (PPM).

(some scientists use mg/l or percent saturation)

Dissolved Oxygen (PPM)

0 1 2 3 4 5 6 7 8 9 10 11 12 13

Mosquito larvae

Salmon eggs and young

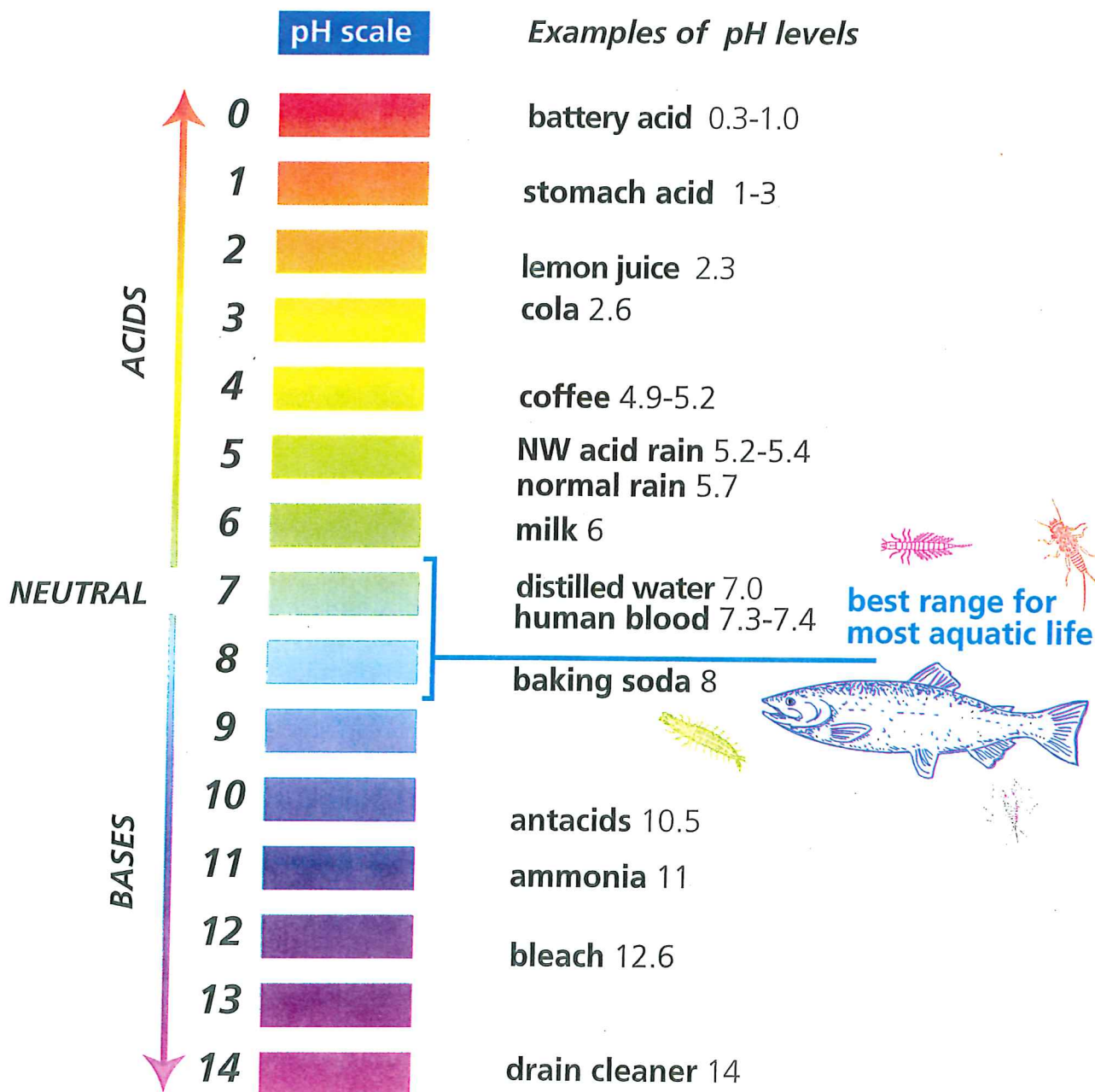
Mayflies/Stoneflies

pH

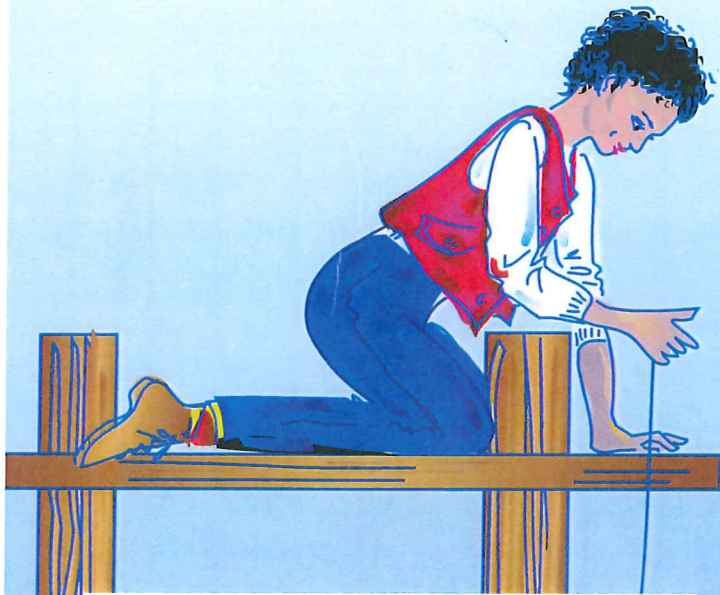
Definition: Measure of how acidic or basic (alkaline) the water is.

Importance: Pollution can change the pH of water.

If water is too acidic or too basic aquatic life can die.



Turbidity Chart



Turbidity: A measure of the cloudiness of the water.

Why is it Important?

- Sediment can smother eggs.
- Sediment can clog the gills of fish and other stream animals making it hard for them to breathe.
- Increased turbidity can result in warmer water, leading to lower levels of dissolved oxygen.

If you obtained a JTU measurement of . . .

You would be able to see down this far with a Secchi Disk.

100

1 inch

90

2 inches

80

3 inches

70

4 inches

60

5 inches

50

6 inches

40

8 inches

30

10 inches

20

1 foot

10

3 feet

0

5 feet

