*Assigned readings, 8th Edition pp. 1159-1165
7th Edition pp. 1092-1097, 1097-1104

Aquatic Ecosystems

Outline of Lecture 10

A. Habitats - How do lakes and rivers differ?
B. Respiration
C. Food
D. Evolutionary relationships
E. Physical features
F. Reproductive behavior
G. Onchocerciasis and biodiversity
H. Malaria

A. Habitats
- Lotic habitats: streams and rivers, with flowing water, oxygen saturation, and temperatures similar to air (in shallow systems).
- Lentic habitats: ponds and lakes, with standing water, often oxygen poor, and temperatures are stratified. *(See Fig. 52.17 on p. 1161 8th Edit. or Fig. 50.13 on p. 1091 7th Edit. about lake stratification and seasonal turnover)*

B. Respiration (permeability of oxygen 324,000 times slower in water than air).
C. Food (autochthonous – within system; allochthonous outside).
D. Evolutionary relationships: lakes fill and disappear but streams and rivers persist in geologic time.
E. Physical features: interaction of temperature and oxygen concentrations.
F. Reproductive behavior
G. Onchocerciasis- river blindness

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Aquatic Ecosystems

H. Malaria is vectored by *Anopheles* mosquitos and caused by *Plasmodium* protozoans.

• Sickle cell anemia and malaria
• medical anthropology of malaria
• malaria control

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