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## **Geologic Field Trips**

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#### Conclusion

This article highlights just a few of the publications available to the biology teacher on decapods. By bringing decapods into the classroom, many more ideas are sure to arise as both the teacher and students become more familiar with these common, yet intriging animals. The next article will deal with crayfish identification.

#### Literature Cited

- Black, J.B. 1963. Observations on the home range of stream-dwelling crawfishes. Ecology 44(3):592-595.
- Bovbjerg, R.V. 1970. Ecological isolation and competitive exclusion in two crayfish (Orconectes virilis and Orconectes immunis). Ecology 51(2):225-236.
- Bruno, M.S. 1971. Teacher's Guide for Crayfish, McGraw-Hill Book Co., New York.Burbanch, W.D., J.P. Edwards, and M.P. Burbanch. 1948. Toleration of lowered oxygen tension by cave and stream crayfish. Ecology 29(3):360-367.
- Camougis, G. and J. H. Hichar. 1959. Some studies on crayfish distribution in a small pond. Amer. Midl. Nat. 62(1):227-231.
- Edmonds, W.T. 1976. Collecting and Preserving Kansas Invertebrates. Technical Publication of the State Biological Survey of Kansas, No. 3:1-73.
- Henry, K.A. 1951. Spring Creek crayfish migrations 1949 and 1950. Oregon Fish Comm. Res. Briefs 3(2):48-55.
- Hobbs, H.H. Jr. and E.T. Hall, Jr. 1974. Crayfishes (Decapoda: Astacidae). In Hart, C.W. Jr. and S.L.H. Fuller (eds.) Pollution Ecology of Freshwater Invertebrates, Academic Press, New York.
- Huxley, T.H. 1880. The Crayfish. Macmillan Publishing Co., Inc., New York.
- Meredith, W.G. and F.J. Schwartz. 1960. Maryland Crayfishes. Educational Series No. 46, Maryland Department of Research and Education, Solomons, Maryland.
- Park, T. 1945. A further report on toleration experiments by ecology classes. *Ecology* 26(3):305-308.
- Park, T., R.E. Gregg, and C.Z. Lutherman. 1940. Toleration experiments by ecology classes. Ecology 21(1):109-111.
- Wiens, A.W. and K.B. Armitage. 1961. The oxygen consumption of the crayfish Orconectes immunis and Orconectes nais in response to temperature and to oxygen saturation. Physiol. Zool. 34(1):39-54.

# \* \* \* Solar Energy Packets

DOE Solar energy Curriculum for Grades 7-12. This program consists of 43 solar energy activities arranged in five packets. Supportive materials include: Solar Energy Text, Reader, and Teacher's Guide. For further information contact U.S. Government Printing Office, Washington, D.C. 20402.

#### Geologic Field Trips

For those interested in geologic field trips for elementary students in Black Hawk County, contact Frank Starr, 319-233-5281. Fossil keys, stratigraphic maps and discussion questions have been developed for specific exploration sites in Black Hawk County.