Fish bioenergetics

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Abstract
In this book, which comprises three main sections, the nutrition and physiology of fish are examined from an energetic standpoint, with the environmental influences upon feeding and growth being emphasized. The opening section (nutritional requirements and dietary formulation) is devoted to a consideration of the nutrition of fish species, both with respect to the quantitative requirements for specific nutrients and from the viewpoint of practical feed formulation. This is followed by the section on physiological energetics - feeding, metabolism and growth, in which each component of the energy balance equation is described in some detail. The book closes with a discussion of the environmental tolerances and preferences of fish species. Greater emphasis is placed on the description of general principles, and examples are selected from different experimental studies in order to illustrate specific points.

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Fields of science
No field of science has been suggested yet.
and transformation of energy in and between living organisms and their environment. We do painstakingly difficult lab experiments (imagine having to measure fish excrement or…). We steal them, I mean “borrow” them! Species borrowing is common, it can cause problems. Should evaluate and test if borrowing is appropriate. (a) fish do not expend energy to maintain a body temperature different from that of their environment; and (b) the excretion of waste nitrogen requires less energy in fish than it does in homeothermic land animals. There are large differences in the ability of different species of fish to digest feed materials. Fish species range all the way from strict herbivores through omnivores to carnivores. Brody, S., 1945 Bioenergetics and growth. London, Hafner Press. Kleiber, M., 1961 The fire of life.