

HERMAPHRODITISM IN *MARGARITIFERA FALCATA* (Gould)  
(Pelecypoda: Margaritiferidae). — Twenty-six specimens of this species were collected on 4 October 1966 from the Blackfoot River at Idaho Hwy. -34, 13 miles north of Soda Springs, Caribou County, Idaho. The animals displayed the anatomical features of the Margaritiferidae Haas (see Ortmann, 1912, Ann. Carnegie Mus., 8: 223), and the morphology of the demibranchs showed *M. falcata* to be a member of the subfamily Margaritiferinae Modell (1942, Arch. Moll., 74: 184). Histological examination of

the visceral mass of each animal (10 slides per specimen) revealed that *M. falcata* consists only of hermaphrodites; true males and females were lacking in the collection. These monoecious animals contained proportionately much more ovarian tissue than testicular tissue which was irregularly scattered in patches ventro-medially to the digestive gland. Very little gametogenesis was present and few sperm morulae were found, and the great bulk of the gonads was filled with mature gametes. Van der Schalie (1966, Malacologia, 5: 77) stated that *M. margaritifera* and *Cumberlandia monodonta* have "occasional hermaphrodites" and that no margaritifereid is "usually monoecious." *Margaritifera falcata* of western North America proves to be an unexpected exception. Among other unionaceans, only the unionids *Lasmigona compressa*, *L. subviridis* (Anodontinae) and *Carunculina parva* (Lampsilinae) are uniformly monoecious (van der Schalie, *Op. cit.*).

None of the 26 individuals of *M. falcata* in this October collection from Idaho were gravid. Murphy (1942, Calif. Fish Game, 28: 89-102) demonstrated that in California this species is a short-term breeder (i.e., tachytictic), being gravid only between mid-May and late June. Ortmann (*Op. cit.*) previously reported that the Holarctic *M. margaritifera* is gravid in the summer (p. 232), and that *M. hembeli* of the southern United States is not gravid in February (p. 236). It is peculiar that in *M. falcata* large quantities of mature gametes are present more than seven months before ova can be expected to be released to the demibranchs. — WILLIAM H. HEARD, Florida State University, Tallahassee, Florida, 32306.