1960

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Trichinella spiralis (Owen, 1835) is a common parasite of mammals in the Arctic. High rates of infection have been recorded in terrestrial carnivores (particularly *Canidae*, *Ursidae*, and *Mustelidae*), but representatives of several other groups, including marine mammals, have been found infected. From existing information, it appears that the natural cycles have at least three ecologically distinct patterns:

1. In the case of terrestrial carnivores, the parasite is evidently transmitted from one host to another when such animals consume carcasses of their own or other species. This situation has been described for red foxes (*Vulpes vulpes*) by Söntgen (1939).

2. Small rodents, such as *Microtus oeconomus* on St. Lawrence Island, evidently become infected when they feed upon the carcasses of carnivores. Once introduced however, the parasite is maintained in the microtine populations when the animals consume others of their own kind. A comparable situation in western Soviet Union was described by Beliaeva (1954).

3. Parasite-host relationships are different in the case of marine mammals (pinnipeds), but the means by which the nematode is transmitted from one host to another has not been definitely determined. There is considerable evidence that walrus (*Odobenus rosmarus*) at times feed upon seals and other mammals. It has been suggested by Vibe (1950) that seals may become infected when they consume amphipods that have been feeding upon infected carcasses; such amphipods would serve only as a means of mechanical transfer of the larvae. Ozeretskovskaia and Uspenskii (1957), and others, have expressed the view that carnivorous birds might be important in the transmission of the larvae in the Arctic. The parasite-host relationships involving marine mammals requires thorough investigation.

Despite the high prevalence of infection in arctic mammals, trichinosis does not appear to be a very important cause of morbidity in the human inhabitants of the Arctic. Outbreaks have been uncommon, and usually have involved few people. According to Fay (1960) the origin of the extensive outbreak that reportedly occurred in west Greenland in 1947 was probably not correctly interpreted. Control of this disease insofar as man is concerned depends upon the practice of suitable sanitary and cooking procedures.