The diet of otters (Lutra lutra L.) in Danish freshwater habitats: comparisons of prey fish populations - DTU Orbit (11/12/2018)

The diet of otters (Lutra lutra L.) in Danish freshwater habitats: comparisons of prey fish populations

Otter spraints from five Danish freshwater localities were analysed. In all localities fish was the main prey (76-99% of estimated bulk), especially in winter. Depending on locality, the prey fish mainly consisted of cyprinids (Cyprinidae), percids (Percidae) or salmonids (Salmonidae). Seasonal variations were found in the diet corresponding to the availability of prey. Non-fish prey categories, such as frogs, birds, mammals and invertebrates, were most frequently taken in spring and summer, but only frogs made an important contribution to the diet (0-21%). The results of analysing 978 otter spraints were compared with prey fish populations as estimated by electrofishing. It was concluded that the fish species composition in the otter diet generally reflected that of the foraging area, however, with the exception of a negative preference for trout (Salmo sp.) and a preference for sticklebacks (Gasterosteidae) in some of the study areas. Otters generally took all available sizes of fish with a tendency for selecting individuals between 9-21 cm, though the preferred size of eels was 18-36 cm. A principal component analysis showed that the variation in diet between the localities was associated with differences in fish communities between free-flowing rivers and lake outflows.

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