Wildlife feeding is a popular human-wildlife interaction throughout the Western World, yet remarkably little is known about the practice and its influences. This study investigated the effects of anthropological feeding upon the natural feeding ecology of the Pacific Black Duck *Anas superciliosa* and domestic duck taxa in ten urban lakes from South-east Queensland. Randomly chosen individuals were observed for five-minute sessions and their behaviours recorded during four time periods: Early Morning; Late Morning; Early Afternoon; and Late Afternoon. Foraging behaviours were collated into six behavioural categories of feeding, bread feeding, movement, resting, preening and social. A total of 200 ducks were observed, 144 Pacific Black Ducks and 56 domestic duck races. The natural foraging activities of the Pacific Black Duck occurred mainly in the early morning and late afternoon while domestic duck races foraged throughout the day. Both the Pacific Black Duck and domestic duck races spent a greater proportion of time foraging naturally than feeding on bread. Although conspicuous, bread feeding appeared to have little impact on the time spent obtaining natural foods. The study also speculated that bread feeding may be monopolized by a few dominant individuals.