

AN OBSERVATION OF INDUCED  
AND ADAPTIVE HUNTING  
BEHAVIOUR IN THE AFRICAN  
LION

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Behavioural adaptation by wild animals to the activities of man probably dates back into pre-history. The literature, however, contains relatively few examples, particularly relating to large carnivores (Berwick 1976). During a visit to Ngorongoro National Park in Tanzania on 18 October 1975, I witnessed an example of induced and adaptive hunting behaviour in two adult-size female lions (*Panthera leo*).

Two lionesses were first observed sunning themselves beside a small pool of water at the junction of two shallow ravines on the floor of the crater. Shortly thereafter two tourist-laden vehicles arrived and may have disturbed the animals because they moved to a new position about 10 m away. I directed my driver to leave and he circled around and took up a position on the opposite side of the branch ravine. After stopping there briefly, he began driving extremely slowly along the track paralleling the main ravine. At the same time, one of the lionesses arose and began to follow the vehicle in which I was riding at a distance of approximately 5 m. The other two vehicles came into line behind this animal and were followed in turn by the second lioness. After this convoy had proceeded perhaps 100 m, the lioness immediately behind me switched her behaviour from an ordinary walking posture into a stalking posture. At this point I

noted the presence of a mixed herd of wildebeest and zebra spread across the head of the ravine approximately 300 m away. These prey animals had not been visible from the point at which the lionesses were first observed. The lead lioness continued to stalk, sometimes screening herself from the herd behind the vehicle in which I was travelling and sometimes utilizing the ravine and its 2 m high bordering vegetation. This behaviour continued for approximately 200 m at which point the vehicle track crossed the ravine and continued onward at right angles to it. After my vehicle turned, the lioness continued forward along the base of the ravine. All three vehicles stopped about 20 m away. The lioness continued to stalk up the ravine and was observed briefly three times before I lost sight of her. The second lioness had not assumed a stalking posture and she stopped at the point where the road crossed the ravine. She sat there on her haunches and appeared to watch proceedings intently. It was not possible to see how closely the lead animal was able to approach the prey herd because of her concealment in the ravine but, approximately 15 min. after last seen, she made her charge. She was unsuccessful.

Language problems restricted the usefulness of communication with my driver but, combining what he said with his driving behaviour, it is clear that his initial actions were an effort to induce the lionesses to follow us. The subsequent stalking behaviour appeared to be a learned, adaptive response to the presence of a vehicle in an environment where cover was limited and vehicles, solely under the control of the Tanzanian Tourist Bureau and consequently no threat to the fauna, were frequently encountered.

REFERENCES

- BERWICK, S 1976. The Gir Forest: an endangered ecosystem. *Am. Scient.* 64: 28-40.