An assessment of injury to badgers due to capture in stopped restraints

Abstract

In Ireland the badger (*meles meles*) is a protected species under the Wildlife Act of 2000. The badger is recognised as the principal wildlife reservoir of *Mycobacterium bovis* infection in Ireland. Infection in the badger population contributes to the spread and persistence of tuberculosis in the cattle population. Badger culling forms part of the national interim strategy for the control of BTB. The stopped restraint has been used routinely by the DAF for capturing badgers for culling. No systematic study had been done in Ireland to assess what physical injuries if any badgers sustain due to capture with stopped restraints, therefore we conducted a study to determine the frequency and severity of injuries to badgers due to capture by this method.

Badgers from culling operations carried out by the Department of Agriculture and Food (DAF) from October to December 2005 and from May to June 2006 were examined at post-mortem to determine the frequency and severity of injuries occurring when badgers are captured using stopped restraints. Skin damage and damage to the underlying tissues caused by the restraint were classified following visual examination. Of the 343 badgers examined, 88.1% had either no skin trauma or minor abrasions, 68.8% had no or localised subcutaneous tissue damage, while 98.8% had either no muscle damage or slight bruising as a result of the restraints. Of those examined 2% had cuts to the skin, 5.5% had extensive subcutaneous oedema, while 1.2% had areas of haemorrhage and tearing of muscle. Histopathological examination of skin biopsies from 327 badgers showed some degree of epidermal necrosis in 82.3% of cases. Univariate and multivariate analysis were used to identify risk factors for injury.