

GUIDELINES FOR MICROCHIP TRANSPONDER SITES



This document summarises the guidelines for microchip transponder sites in animals.

Table 1 summarises the views of the Council of the British Veterinary Zoological Society (BVZS). Alternative guidelines are given for reference.

Table 1

Animal type	Placement
FISH	Midline, anterior to dorsal fin.
AMPHIBIA	Lymphatic cavity dorsal lymph sac.
REPTILES	
Chelonians	subcutaneously in left hind leg (intramuscularly in thin skinned species); subcutaneously in the tarsal area in giant species.
Crocodylians	Anterior to nuchal cluster. Or the craniolateral tail - this is particularly good for hatchlings of smaller species (where anterior to the nuchal cluster would be difficult) that should be chipped within a few days of birth, as is the case for CITES species. It also has the advantage that if the croc is big, the chip can be read away from the sharp end.
Lizards	Lateral aspect of left femoral area, over quadriceps muscle, or subcutaneous on caudal half of left flank if too small or legs too skinny or absent.
Snakes	Left flank, anterior to cloaca. In this position the microchip is less likely to interfere with ingestion of very large prey or with handling. It is also much safer for the handler if dealing with venomous species and probably easier to implant, mainly in smallest species where fingers can get in the way. NB: it is recommended that tissue glue is placed over the needle entry site in all reptiles.
BIRDS	Left pectoral muscle. Exceptions: ostriches - pipping muscle; penguins - subcutaneously at base of neck.
MAMMALS	
	Large: left mid-neck subcutaneously. Medium and small: between scapulae.
Primates	Alternative site - back of hand (metacarpal) or foot (metatarsal). This area is suitable if animals can be trained to present hands or feet through cage bars.
Elephants	Behind the left ear, or wherever appropriate for the individual animal.
Equids	In the nuchal ligament.

Table 2: Global implantation site recommendations for different classes of vertebrates. All transponders should be inserted on the animal's left side when applicable (Source: CBSG news)

Animal type	Placement
FISH	Large (>30cm): left base of dorsal fin. Small (<30cm): coelomic cavity.
AMPHIBIANS	Lymphatic cavity, cover wound with tissue glue
REPTILES Chelonians	Left hind limb socket.
Crocodylians	Anterior to nuchal cluster.
Lizards	(large>12.5cm snout to vent):left inguinal region. (small <12.5cm snout to vent): intercoelomic cavity.
BIRDS	Large (>1.5kg and/or long-legged): dorsally at juncture of neck and body. Medium to small (1.5kg): left pectoral muscle. Note: all Psittaciformes left pectoral, all New and Old World vultures base of neck, all other Falconiformes left pectoral muscle
MAMMALS	(size measurement is distance between back bone and shoulder blade of adult mammal) Large, medium-large (>17cm): behind left ear, at base. Small, medium-small (<17cm): between shoulder blade, left of centre.

Table 3:Exceptions to global implantation site recommendations

Animal type	Placement
Elephant	Main caudal fold parallel to tail on left side
Hyrax	Intralumbar. left side (thick skin on neck makes implantation difficult).
Loris	ralumbar, left side (dermal shield makes scapular implantation difficult).

Table 4: Federation of Zoological Gardens of Great Britain and Ireland guidelines for transponder sites

Animal type	Placement
FISH	Base of dorsal fin.
AMPHIBIA	Lymphatic cavity.
REPTILES Chelonia	Left shoulder.
Snakes and lizards	Dorsal side of the tail base.
BIRDS	Left pectorals and left thigh.
MAMMALS	Behind the left ear or between scapulae.

The Federation recommends that transponders are used in the following animals:

- All animals which are part of Joint Management schemes, UK, Regional, EEP or International studbooks
- Founder and F1 animals
- Psittacines or other species that are likely to be stolen due to trade factors
- Animals under permanent quarantine regulations
- Animals to be exported
- Animals that have no sexual dimorphism
- All species on CITES Appendix 1.