

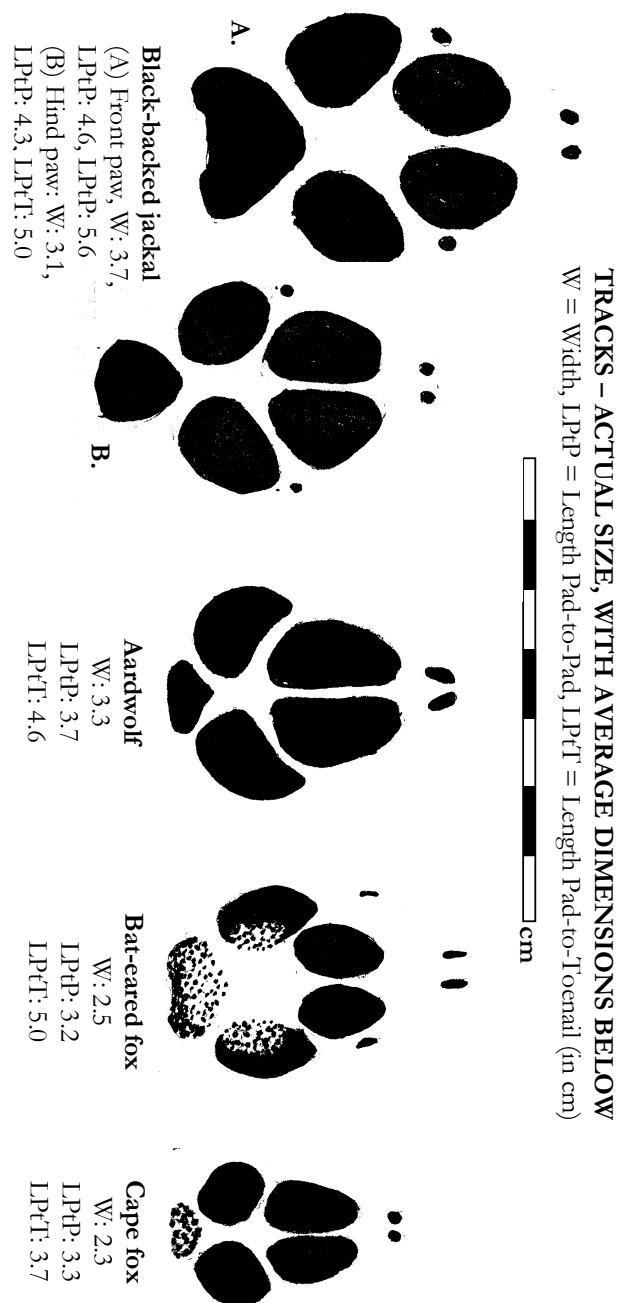
TRACKS AND SIGNS

1. BLACK-BACKED JACKAL (Rooijakkals, *Canis mesomelas*). **Track:** Toes are rounded, fat-looking and usually spaced apart. Front paw: oval, with a very characteristic large triangular main pad, indented in the middle. Its width is about the same as that of the front toes. Hind paw: smaller, often resembling a five-petal flower. The main pad is small, round or slightly triangular, and placed clearly behind the toes. **Behaviour:** often scratches and/or rips out the cotton pad.

2. AARDWOLF (*Proteles cristatus*). **Track:** almost triangular in shape. Toes very pointed, the front ones much longer than the side ones. Toenails long. Main pad close to the toes, shows up either as a faint dash or a dot; and often not at all.

3. BAT-EARED FOX (Bakoorvos, *Otocyon megalotis*). **Track:** round, with very long toenails. Toes spread out widely. Main pad often obscured by fur. Very light track. **Behaviour:** often rolls in the scent pad.

4. CAPE FOX (Silwervos, *Vulpes chama*). **Track:** shape resembling a teardrop. Pronounced front toes (like a miniature aardwolf). Main pad often obscured by fur. **Behaviour:** often defecates/urinates on pads.



INSTRUCTION MANUAL

BY J. BAGNIEWSKA, J. KAMLER

Scent-Station Surveys



Scent-stations are a low-cost, time-efficient method to determine the relative abundance of canid species. They are particularly suitable for jackals, which travel roads for territory-marking purposes. They also allow the detection of presence/absence of secretive species such as the brown hyena, black-footed cat, etc.

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HOW TO RUN SCENT STATIONS

EQUIPMENT

You will need the following tools:

Shovel • Broom • Small bucket • Fine sieve • Soft brush • Watering can • Hammer • Eyedropper • Calliper

And the following materials:

Cotton pads • Nails • Water (~1.5 l per station) • Very fine sand or dust (~6 kg p. s.) • Synthetic fermented egg solution (or other smelling agent)

SITE

- Depending on area of interest, establish a series (e.g., 3-6) of transect lines randomly throughout the site.
- Preferred sites for transects are long, straight unimproved roads or trails. Each transect should consist of min. 10 scent-stations, spaced at least 0.5 km apart.
- Along each transect, place scent-stations next to the road (see photo), so animals travelling roads can readily visit them. Alternate the scent-stations between both sides of the road.

Choose a season that is not windy or rainy. Check the forecast – weather should ideally be uniform for all station-nights. Winter is preferable, because all animals should be adult size, and yearlings should have dispersed (leaving only resident animals).

MAKING THE STATION

It takes about 5-7 min. per scent-station.

1. Clear a 1-m circular space. Level the ground and remove all vegetation using the shovel. With the broom sweep away small rocks and excess sand. The surface should be as hard and smooth as possible.

2. Sift a thin layer of sand on top of this cleared surface. Even it out with a soft brush.

3. Pour water over the top, evenly, making sure that no water marks are left. Wait for the water to soak into the ground.

4. Sift more sand on top of the station, leaving a layer of fine dust.

5. Nail the cotton pad in the centre of the station. Make sure it cannot be easily removed.

6. Bait the station. Using an eyedropper, put 1 ml of the scent solution on the pad.



7. With the soft brush, clear away the area immediately surrounding the station. This could provide additional data (the animal's path, stride, etc.).

CHECKING THE STATION

Bear in mind that some canids (e.g. bat-eared foxes) are diurnal in winter. To reduce the destructive influence of other diurnal species (e.g., meerkats, mongooses), check the stations early in the morning, before their activity starts.

1. Approach carefully, noting any additional tracks or sign leading to the scent station.

2. Examine each station carefully, as some tracks are very light. Record whether or not the station was operable, as tracks could have been obliterated by wind, rain, excessive use by other animals, etc. Record the tracks of each species present. Measure and photograph if necessary.

3. When finished, brush away the tracks, and sift more sand on top of the station. If pad is missing or seriously damaged, replace it and add more scent solution. If possible, sweep the ground immediately surrounding the station.

4. Run stations for 1-5 nights in a row.

DATA ANALYSIS

1. Data from each transect are tabulated as:

$$\frac{\text{No. stations with tracks}}{\text{No. operable stations}} \cdot 10$$

2. Statistical comparisons of data between years or sites should be made with Mann-Whitney or Wilcoxon Signed Ranks tests.