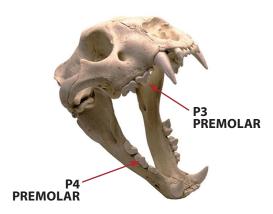
#### Teeth



All 30 permanent teeth are visible between 15–17 months, sharp and white. At 3–4 years, all teeth are fully erupted and mostly white. Only a small amount of wear on incisors and canines. Little to no wear on premolars noted above.

By 5–6 years there is obvious wear on the canines, incisors, and all premolars. Canines are now yellow at the base and the longitudinal ridge is often chipped. Uncommon to have more than one canine broken or missing.

From 7–9 years all teeth show wear, with it being most obvious on the canines and incisors. The incisors show the most wear on the upper and lower outermost tooth, some often missing. Nearly all teeth yellowed and canines commonly broken.

## Leg Markings



Due to scent marking conspicuous dark markings develop on the back hind legs. Most often found on breeding resident males between 3–7 years, they are most prominent between 4–5 years and taper off with age.

## Nose Pigmentation

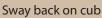


After about 3 years of age, the fleshy part of the nose begins to freckle or become liver spotted. As the lion ages, more pigmentation appears until the nose is entirely black by about 8 years. A general rule of thumb is that by 6 years noses are >50% black.

#### **Traits NOT to use**

A swayed back, donkey-skin coat color or elbow tufts are not related to old age.







Straight back, no elbow tufts







Donkey-skin

# Pocket Guide to Aging Lions

by Karyl Whitman, PhD

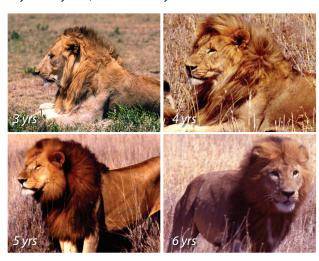
#### (Conservation Force)

on behalf of Conservation Force www.conservationforce.org

It is best to use a combination of traits to estimate a lion's age. A large degree of variation exists in the expression of each trait, therefore relying on only one factor can be misleading. The most reliable estimate will be the composite of five key areas: the mane, teeth, leg markings, nose color and facial characteristics.

### Mane Trends

As this one male shows at different ages, between 1–3 years, the mane around the neck is longer and darker than on the shoulders, but by 3–4 years the areas are similar in length and color. The chest continues to darken with age. After 4 years, the chest and shoulders are often darker than the forehead and contrast significantly with the hair around the face. By 5–6 years the mane begins to fill in the area around the shoulder. Beyond 7 years, manes slowly lose condition.



## Immature: 3 and 4 years

3 and 4-year-old males are not mature. Their skeleton will continue to grow for another year. The chest is more broad than a 2-year-old, but does not have the breadth or bulk of a 5-year-old. Mane development is highly variable. The 'mohawk' is visible on the forehead and the shoulder area and area behind the ears has not filled in yet.



Nose Pigmentation: 3 yrs: 15-30% nose black; 4 yrs: 25-50%

**Mane:** Mohawk & shoulder patch present.



Chest and shoulder can be darker than neck and forehead.

**Teeth:** Typically white with minimal yellowing. Little wear except for slight chipping on the longitudinal ridge on the back of the canines—if any teeth are not fully erupted he is younger than 3 years.





Adapted from: Whitman, K.L. & Packer, C. 2007. A Hunter's Guide to Aging Lions in Eastern and Southern Africa, Safari Press, Long Beach, CA.

## Mature: 5 and 6 years

5 and 6-year-olds are in their prime, fully grown, and massive, especially in the shoulders. Foreheads and chest are broad and manes usually are well developed.



Nose Pigmentation: 5 yrs: ~ 50% of nose is black (range 35-60%) 6 yrs: ~60% of nose black (range 37-85%)

**Teeth:** Canines are yellow at the base, light at the tips, and the back ridge is slightly worn or chipped. Unlikely to have more than one canine broken.

Incisors are still fairly white, rarely missing, and will show a small amount of wear.



Chest often dark.



**Mane:** By 5½ years the forehead section is fully filled between and behind the ears. By 6½ years, the mane is fully developed: the shoulders are filled in and the mane is nearly continuous from the ridge of the back to the chest.

## Aged: 7+ years

Fully mature and massive, muscle tone declines with age so they may appear smaller than younger males. Hair on the muzzle begins to thin by about 7 years and becomes progressively "pock-marked". Mane fully developed with ends mostly smooth but begins to look fuzzy around 7 years. Greater than 8 years, the mane loses condition, may thin, hair ends split, and length shortens as lion loses condition.



Muzzles and flanks can be heavily scarred.

Whisker spots more difficult to discern >9 yrs and lions begin to look slack-jawed in expression.

**Teeth:** Conspicuously yellow teeth, with all showing heavy wear. Canines often broken and incisors may be missing.





**Nose Pigmentation:** 7 yrs: ~50-85% black 8 yrs: 75-100% black 10 yrs: 100% black