

HOW OLD IS YOUR TROPHY LION?

FOR PH AND HUNTER ALIKE, LEARNING TO JUDGE THE AGE OF A LION IS CRUCIAL TO ENSURING WE CAN CONTINUE TO HUNT THE KING OF BEASTS FOR YEARS TO COME.

African lions have long been considered one of the ultimate big-game trophies. Yet today, the hunting of lions has become a hotly contested topic. The debate over the value of hunting individual lions as a tool toward helping to conserve lion populations is unlikely to end soon. But there is one goal common to those on all sides of the debate: to ensure that African lion populations thrive and roam freely in the wilds of Africa for generations to come.

For any hunted species, a keystone of conservation is sustainability, and the basis of sustainable harvest lies in selectivity. Long-term studies have shown that for African lions, age is a key factor.

When a new male lion takes over a pride, he will kill any young cubs that are present so that the females will come into estrous and sire his offspring. Therefore, shooting male lions when they are less than at least six years of age in most cases removes them from the population before they have had a chance to successfully breed and raise their young.

Most lion-hunting countries are moving toward age-based trophy selection, which may include strict regulations (and possibly penalties) for shooting underage lions, so basing the selection of your trophy lion on age is soon going to be the norm, rather than the exception. The goal of age-based trophy selection is to provide superior trophies with minimal impact on the lion population.



BY PAULA A. WHITE

Looking at Lions

Years of fieldwork have shown that aging lions “on the paw” is no easy task. Physical characteristics, however, can provide valuable clues.

Sub-adult lions (from two to three-and-a-half years old) are unmistakable given their spotted coloration and generally immature physical appearance. Judging the ages of young and maturing adults (from four to six years old) can be more challenging because nose coloration and extent of mane development vary both among individuals and by geographic region.

Although males may live to twelve years or more in the wild, lions that are seven to eight years and older usually exhibit obvious features of advancing age, including massive skulls, well-developed head muscles, sagging jowls, fur that is dull, thinning, and often pockmarked, and blackened skin around their eyes. The manes of old lions often have a woolly appearance. Experienced PHs note features such as head shape, fur quality, and scarring as useful indicators to help determine a lion’s age. From a sustainable hunting and conservation point of view, the older the trophy lion, the better.



Thinning fur makes the black skin around an old lion’s eyes more apparent and often gives the face a dull or pockmarked appearance. A black nose is sometimes considered a feature of age; however, nose color appears to vary regionally. Sagging jowls and visibly worn teeth are genuine indicators of advanced age.



This proud youngster might be trying to act like a big boy, but the spots on his legs and belly, clean face, and sharp, white lower incisors indicate that he is still little more than a juvenile.



This handsome young male’s glossy fur and bib-mane show that he is still many years from his prime. Over the next three to four years, he will develop a full mane and earn the opportunity to pass on these splendid genes to future generations.

Tale of the Teeth

A lion’s teeth provide an excellent indication of its age. Increased tooth discoloration, wear, and loss become more pronounced with advancing age. Both diet and the environment in which a lion lives (sandy or woodland) contribute to different rates of tooth wear. Study the photos below for some general rules of thumb that provide a good estimation of lion age across the board.

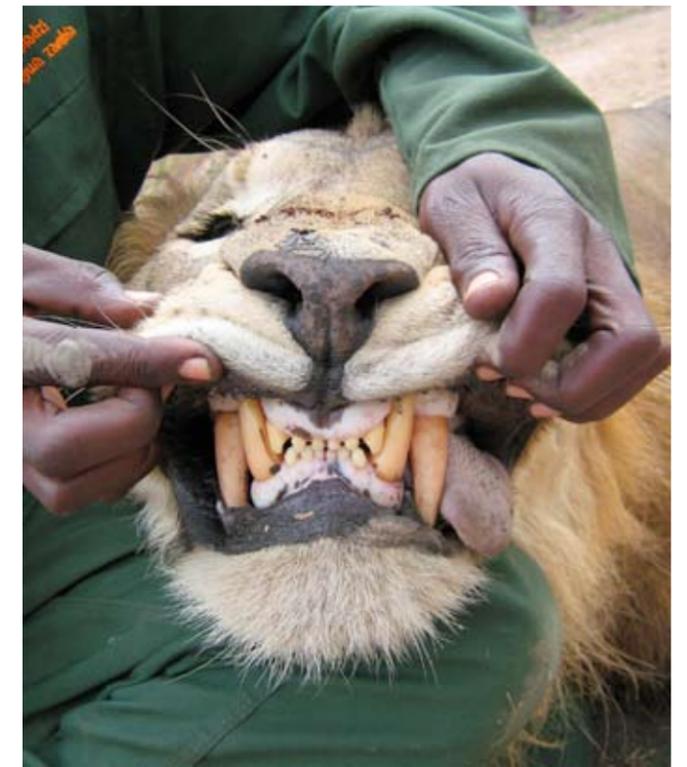
If you’ve hunted a lion in the past, pick up that trophy lion skull up off of the shelf and give it a close look. If its worn teeth show the earmarks of a grand, long life, well done! The knowledge that your trophy lion was a “good old boy” should lend even deeper appreciation and enjoyment—and bragging rights—awnew. If, on the other hand, the teeth are sharp and perfect, consider dropping your professional hunter or safari operator a line asking why. And if your PH gauged it as young and you shot it anyway, then this may be a good time to take a closer look at yourself.

Lion hunts don’t come cheap, and there is tremendous pressure on everyone involved in these hunts to “succeed.” Hunting is a right, but having wild lions to hunt is also a privilege. Only by assuming personal responsibility and insisting on sustainable hunting practices can we hope to argue the merits of lion hunting as a conservation tool. Those who would willfully undermine good hunting ethics by shooting underage trophies are robbing the rest of us of our right to hunt wild lions in the future. It is time to realize that bringing home a young lion as a trophy constitutes failure rather than success.



A lion’s teeth turn yellow with age. Don’t worry, though—the cleaning process used by taxidermists removes natural coloration, so the teeth in most lion trophy skulls will be nearly white, as they are in the skull above.

A photo of the teeth taken at the time of the hunt, such as the one at right, will provide a more accurate assessment of your lion’s true tooth color, and its age. A lion’s teeth begin to yellow during its third year, and by the age of seven the teeth are uniformly dark. Pale incisors suggest that this lion was not yet six years old.



When a lion is young, the large canine teeth in its upper jaw have a sharp ridge that runs down the back of each tooth. Between about four and six years of age, this ridge slowly starts to chip until it is completely worn away.



At four years old or less, a lion’s canine ridge is sharp and intact, like the one on the left. The ridge begins to chip away during the lions’ fourth year, as in the middle photo. By age six, the canine ridge is usually completely worn away, as in the photo on the right. Note the worn canine tip.



The canine teeth in the lower jaw develop a groove that deepens with age. The photo on the left, above, shows the developing groove on a lion of about five or six years of age. On the right, the deep groove worn into the back side of the lower canine and the smooth tip are a good indication that this lion was probably about eight years old.

Below, premolars and molars, or “cheek teeth”, wear more slowly. By about eight years of age, the cutting V on the rear molar has developed a highly polished sheen from years of slicing through meat. Eventually, these teeth wear thin and begin to break.



As lions get older, they tend to damage and lose teeth. Tooth loss and breakage tend to occur at older ages, although a young adult may occasionally break a tooth through traumatic injury (like being kicked by a buffalo). Front incisors are often the first teeth to be broken or lost.

The incisor in the photo above was lost during the lion's lifetime, as evidenced by the bone that has grown to fill in the empty tooth socket. Empty tooth sockets with clean, distinct edges probably held a tooth at the time the lion died, but the tooth was later lost from the trophy skull.

A broken canine or abscess can result in rapid or uneven wear on the remaining teeth and should be assessed in relation to overall wear. Damage to teeth may also occur during or after the hunt. Dry climates can cause trophy teeth to chip or crack. Sharp edges on teeth indicate damage that occurred after death.



Overall tooth wear and natural color is more informative than tooth loss. The uniformly sharp and unworn teeth of the lion on the left suggest that it was no more than four years old.

Extensive discoloration and excessive wear coupled with tooth damage and loss are definitive signs of advanced age. The lion on the right is estimated to have been at least ten years old.



Problem Lions

On occasion, lions that are livestock killers or direct threats to human life are earmarked for destruction by the regional wildlife authority as “Problem Animal Control” (PAC). PHs are often called upon to assist with the removal of PAC lions, and a hunting client may be asked of their willingness to shoot a problem lion as their trophy animal. PAC lions are often young animals that are destined to be destroyed. Under these very special circumstances, shooting of underage lions does not constitute irresponsible hunting practices.

Dr. Paula A. White is Director of the Zambia Lion Project, research aimed at promoting sustainable hunting practices to help ensure the long-term future of lions and lion hunting. This research is supported by Safari Club International Foundation, Dallas Safari Club, Shikar Safari Club, Conservation Foundation, and others.

For more information, please contact Dr. White at paw@carnivoreconservation.com.