



HUNTING BOW SHOOTING EXERCISE

1. Introduction

The purpose of this exercise is to give members the opportunity to practice and develop their skills with a hunting bow. This is a basic exercise that can accommodate beginners as well. Limitations on equipment are avoided as far as possible within the framework of applicable equipment in the hunting field. A field range is ideal, but the exercise can be shot on a shooting range as well where a number of archers can participate simultaneously alongside each other.

2. Target

The Impala target of the SAHGCA will be used. Other targets may be introduced by the Shooting Committee from time to time. The head of the animal may point to the left or right. Placement of the arrow in the 3 scoring area is not ideal, especially in the vertebrae area. For the purposes of the exercise the target are not changed.

Although three dimensional targets are very popular, they are expensive and are not used for this exercise.

3. Bows

All minimum specifications, according to category 2 of the schedule included will apply. No limitations on the type of bow. Crossbows, however are not allowed since it is illegal to hunt with.

4. Arrows

All minimum specifications, according to category 2 of the schedule included will apply. Please note that all equipment allowed for this shooting exercise are not necessarily suitable for application on the species on the target. It is the responsibility of the hunter to ensure that his/her equipment are suitable for the species to be hunted. Only target type arrows are allowed, but archers are encouraged to use arrows with a trajectory similar to their hunting arrows.

5. Sights

No restrictions.

6. Other equipment

The use of full hunting equipment/clothing are encouraged to familiarise the hunter with its use.

7. Unique safety measures/commands

These rules do not replace any existing range safety measures but must be applied as supplement thereto. The command "ready" follows to warn the participants that the start whistle will follow in a few seconds. At this stage bows are not drawn. When the start whistle is sounded, bows are drawn, and shooting commences. Sufficient provision to provide a backstop for arrows need to be provided. This apply to arrows that missed the target as well.

8. Exercise

- a. From **20 meters, three arrows** are fired in the **standing position**, in **30 seconds per arrow**. Sitting and kneeling is appropriate as well, but too advanced for this exercise.
- b. From **30 meters, three arrows** are fired in the **standing position**, in **30 seconds per arrow**.

Six arrows in total.

An opportunity must be provided to any participant to remove his/her arrow, before shooting another arrow, to prevent damage to arrows.

Although distances are known for this exercise, the use of range finders for hunting are encouraged.

9. Scoring

Scoring are done prior to removal of the arrow. In the event of an arrow touching the line between two positive scoring areas, the higher count will be given. In the event of the arrow touching the line between a minus an a zero, the minus will count, since the animal will be deemed wounded. The line need only to be touched and need not be broken.

If an arrow is fired after the time limit the participant will lose the highest score on the target.

A participant shooting at the wrong target, will lose the score for those shots.

10. Recognition

Only the first effort of the day will qualify for awards with cut-off points for bronze, silver and gold at: **18, 21 en 24**. Maximum score is **30**.

11. General

Any behaviour, equipment, technique or anything else which in the judgement of the range officer is not within the spirit of the hunting bow shooting exercise, is unsafe or inconvenience to other participants will be banned. Should there be any doubt, it should be clarified with the shooting committee beforehand.

Formulas:

<u>Energy (ft/pound)</u>	=	Total arrow weight (grain)	x	Velocity	Square(ft/sec)	divided	450436
95.95		500		294			450436
<u>Momentum</u>	=		divided	x	velocity	divided	32
0.6851		522	7000		294		32
<u>Tissue penetration index</u>	=	Kinetic energy (ft/pound)	x	momentum			
65.74		95.95		0.6851			

F.O.C. of arrow =

Minimum specifications:

<u>Category Game</u>	<u>Game</u>	<u>Draw Mass (pd)</u>	<u>Kinetic energy (ft/pd)</u>	<u>Momentum (pd/sec)</u>	<u>TPI</u>	<u>Arrow weight (Grains)</u>	<u>Weight minimum/ Speed of arrow</u>
1	Birds, Hares, Rabbits, Hyraxes, Soenie, Common Red & Blue Duiker, Oribi, Steenbuck, Klipspringer	40 pds	40	0.3	20	300 to 400 gr	300gr= 290 ft/sec 350gr = 255 ft/sec 400gr= 235 ft/sec
2	Common Mountain & Grey Rhebuck, Impala, Blesbuck, Nyala, Bushbuck, Warthog, Bushpig, Baboon, Springbuck	50 to 60 pds	60	0.35	30	400 to 500 gr	400gr = 270 ft/sec 500gr = 235 ft/sec
3	Blue & Black Wildebeest, Zebra, Kudu, Waterbuck, Gemsbuck, Sable, Tsessebe, Lion, Roan, Eland, Hartebeest, Crocodile, Leopard	60 to 75 pds	70	0.4	40	500 to 600 gr	500gr = 255 ft/sec 600gr = 230 ft/sec
4	Buffalo	80 pds	80	0.45	50	600 to 700 gr	600gr = 250 ft/sec 700gr = 230 ft/sec
5	Rhino, Hippo, Giraffe	95 pds	95	0.55	55	800gr	800gr = 237 ft/sec
6	Elephant	105	105	0.6	60	800+gr	800gr = 245 ft/sec



Actual size of target: W x H = 750 x 1000mm

Target areas	W x H mm	Area cm ²	vs Heart
Heart:	96 x 102	76	--
V-heart:	57 dia	25	33 %
Central heart/lung:	173 x 177	272	350%
Larger lung/ vertebra:	235 x 226	512	670%

Scores are printed on the target.

The actual lines on the target are thin red lines which are not visible from a distance.