

Shooting Tests on Backstopp Netting (4 Base Types)

Date: **11th June 2010**

Location: Rossach, Fa. Bearpaw; 3D - Parcours, Warmup Shooting range
 Tests conducted: from 14:30 PM to 21:30 PM
 Weather: Sunny, Temperature approx. 25 °C
 Wind at shooting range: Zero to 1;

Bow 1: Field Star Recurve Take Down: **30 lbs** at 29.5 inch draw length
 Bow 2: Quick Stick Langbogen: **50 lbs** at 29.5 inch draw length

	Arrow#:	Weigth in grain	Speed*)		
			in gramm	in ft/sec.	in m/sec.
Arrows for Bow 1: **)	1	232	15,0	173,8	53,0
Carbon Impact	2	231	15,4	171,8	52,4
Traditional Hunter Extra Light	3	232	15,5	177,0	53,9
Plastic Fletches 3 "	4	230	15,3	170,3	51,9
Shaft / Tip Dia.: 5,66 mm	5	231	15,4	175,5	53,5
Tip Bullet Form					
	Av. Value	231,2	15,3	173,7	52,9

Average Kinetic Energy: = 1/2 m * v² **21,5 Joule (Ws)**

Arrows for Bow 2:	1	350	22,7	190,6	58,1
Gold Tip, Expedition Hunter	2	347	23,1	186,4	56,8
Hardwood Green 500 28"	3	353	23,5	194,6	59,3
4*5 Saubuckel	4	353	23,5	194,0	59,1
Bearpaw Natural Feathers	5	358	23,9	188,2	57,4
Shaft / Tip Dia.: 7,92 / 4,38 mm					
Tip 3D - Combo / Step Tip	Av. Value	352,2	23,3	190,8	58,1

Average Kinetic Energy: = 1/2 m * v² **39,5 Joule (Ws)**

*) Arrow Speed measured with **Easton Easton Bow Force Mapper** - Speed measurement device; Measurements conducted before shooting on test objects!

) Some **arrows were replaced during the shooting event because of destroyed fletches

Test Shooters: Henry Bodnik
 Christoph Unger
 Filming / Interviews: Markus Flach
 Documentation: Harald Fischer

Shooting Distances: 10 m
 15 m not all nets were tested in that range
 18 m
 30 m
 50 m

Shooting Frequency: each bow: 15 shoots on net at each distance; making total 30 shots per distance; total each net has seen at least 120 hits!

Target area: eye hight (1.7 m from Ground)
 middle of net from both sides apart

Shooting: Shooters always pulled the full draw length acc. speed measurement base settings!
 Shooting breaks were built in to maintain these critical base parameters!
 Always shooting run of 5 shoots (3 times totally) were done and the results were documented each time;
 totally 15 shoots on each net at each distance with each bow were done!

Test Evaluation 3 Categories were determined:

Pass 1: (P1) Arrow was stopped by the net, did not penetrate it and dropped before the net to the ground
 Pass 2: (P2) Arrow did penetrate the net; but still stucked into it
 Failure: (F) Arrow was shot through net