

Two Hand Tapers



Two Hand Tapers

This is a collection of 95 tapers of two-hand bamboo rods, mostly of rods from major rod companies.

I have had many of them in my workshop over time, for minor repairs or full overhauling, where I measured them with or without varnish. For several, also, other details are listed, like guide placement, ferrule size, handle length, etc. Other rods in possession of angling friends I could borrow for measuring.

Some of the tapers have been published in my paper "European Rod Tapers" (2006).

Rod making friends from different countries have contributed with measurements of their rods. Their names appear on top of the table(s).

Yet others have contributed tapers of rods of their own making. Many thanks to them. Other makers I have asked for a contribution were concerned about the work they have put into their tapers and would rather not share them with the public. Something I can understand.

The joined rods were measured, at the given intervals (usually 5 inches), over all three pairs of flats (1-4, 2-5, 3-6), and the mean value was recorded. Often, the calibrations right next to the ferrule are given, too, at the last possible position. The measurements start at the very tip of the tip-ring (= 0, zero), or just below the tip-top guide (= usually 2 in.) and continues towards the butt (handle). Under the handle no measurements could be taken, so a guesstimated continuation is drawn in the graphs as a dotted line.

Both tips of rods (sometimes even 3 tips and 2 mids) were measured and the mean value is given in the tables. Several rods of the same model are listed twice or more, to show the latitude of a given taper. Some tapers may have been adjusted or changed during their time of production, sometimes several decades.

When guide positions are recorded, they start at the very end (tip) of the (joined) rod, and continue towards the handle.

Most rods have ferrules of rather large dimensions. All ferrules are of the step-down type, of nickel silver or brass. Others, notably Sharpe's of Aberdeen, are "spliced". The splices, when joined, are some 30-40 % or more thicker than the adjacent parts, to bear the extra stress involved over the joining (see graphs). For transport or storage they are covered with splice-protectors. I have measured some of these splices, sections joined (taped), at 1 inch intervals, also over all 3 pairs of flats. They are marked yellow in the tables. Others are measured only at the thickest point, with yet others the splices are omitted. Sharpe's rods are, also, impregnated, using the Orvis patent procedure from 1950.

Very long and stout rods often have the butt-pieces and sometimes also the mid-pieces double-built. This can be seen when removing the butt-caps, or at the splice-faces.

Also included are 2 non-fly-rod tapers. Nos. 23 and 24 are Spinning and Roach Rods, respectively. And 2 rods from older literature, nos. 79 and 80. Finally I have included some Greenheart-tapers from the famous Alexander Grant as produced by Playfair of Aberdeen.

More info about Grant and Playfair can be obtained here:

http://www.feathersfliesandphantoms.co.uk/c_playfair_9.html

Two of the taper-sheets (diagrams) presented there are "translated" into more readable tables and graphs (thanks to Colin Innes for kind permission). Information about the owner of the 18-foot monster can be found in the internet.

Some Makers (companies) numbered their rods with letters and numbers, after their own peculiar system. Those of Hardy and Pezon & Michel can be found in the internet. Others, like H.L. Leonard, can only be narrowed down to a time-frame according to the inscription (stamp) on the rod (usually on the reel-seat). Hørgård of Norway started numbering his rods right from the start of the company in 1934, and continued to do so until its closing in 1985. Yet other rods have no numbers.

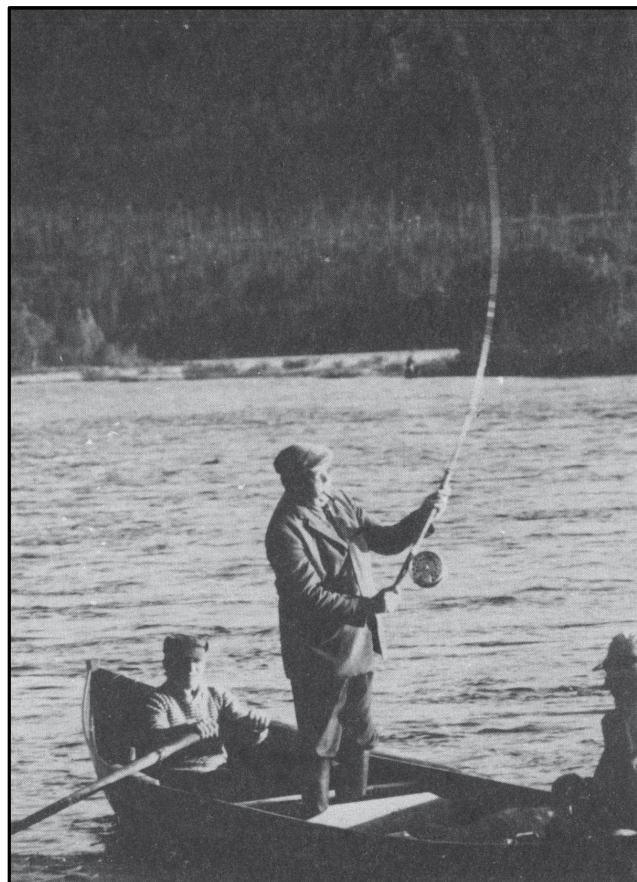
I have included, in the appendix, a table of production data for Sharpe's rods, re-arranged from information available from the internet.

Also, a list of rod-models produced by Hørgård, from after WW II until 1985. The last ever made Two-Hander was a double-built model H. C. of 12' 0" with the number 118809. It was given as a present to rod maker foreman Thorleif Wanvik when he retired.

Little information is provided relating to rod companies. In the age of the Internet it is easy to "google" for such information.

In the appendix I have included a number of graphs and some more information as well as photos of rods or details. Also some pictures of ferrule making from solid stock.

Wolfram Schott
Jan. 2018



His Grace, the 9th Duke of Roxburghe casting with his 18 foot rod and his number 1 Hardy Alta reel, ca. 1950

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Hardy The Norwegian Rod s.c. 17' 0" # 12 + Nr. C 12893 (1921)			Hardy LRH Salmon Fly 14' 0" # 10/11 Nr. A/A (1966)			Hardy LRH Salmon Fly s.c. 14' 0" # 10/11 Nr. H 7500 (1956)			Hardy LRH Salmon Fly 14' 0" # 10/11 Nr. J 3986 C/X (03/1977)		
over varnish			over varnish			over varnish			over varnish		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
2	3,66	0,144	1	3,88	0,153	1	3,77	0,149	1	3,68	0,135
5	4,22	0,166	5	4,28	0,168	5	4,13	0,162	5	3,97	0,146
10	4,96	0,195	10	4,97	0,196	10	4,84	0,191	10	4,70	0,175
15	5,51	0,217	15	5,60	0,221	15	5,54	0,218	15	5,47	0,205
20	6,03	0,237	20	6,31	0,248	20	6,28	0,247	20	6,05	0,228
25	6,69	0,263	25	6,73	0,265	25	6,90	0,272	25	6,59	0,250
30	7,22	0,284	30	7,17	0,282	30	7,42	0,292	30	7,07	0,268
35	7,56	0,298	35	7,62	0,300	35	7,90	0,311	35	7,51	0,286
40	8,11	0,319	40	8,08	0,318	40	8,40	0,331	40	7,99	0,305
45	8,45	0,333	45	8,50	0,335	45	8,84	0,348	45	8,45	0,323
50	8,84	0,348	50	8,90	0,350	50	9,16	0,361	50	8,84	0,338
55	9,18	0,362	53	9,19	0,362	53	9,27	0,365	54	9,14	0,346
60	9,82	0,387									
65	10,20	0,401	60	10,06	0,396	60	10,06	0,396	60	10,13	0,385
			65	10,26	0,404	65	10,41	0,410	65	10,50	0,400
72	11,36	0,447	70	10,55	0,415	70	10,63	0,419	70	10,86	0,414
75	11,31	0,445	75	10,95	0,431	75	11,01	0,433	75	11,14	0,425
80	11,61	0,457	80	11,13	0,438	80	11,34	0,446	80	11,34	0,433
85	11,68	0,460	85	11,44	0,450	85	11,54	0,454	85	11,67	0,446
90	12,08	0,476	90	11,67	0,459	90	11,84	0,466	90	11,97	0,457
95	12,35	0,486	95	11,95	0,470	95	12,01	0,473	95	12,26	0,469
100	12,56	0,495	100	12,13	0,477	100	12,29	0,484	100	12,50	0,478
105	12,84	0,506	105	12,43	0,489	105	12,67	0,499	105	12,63	0,484
110	13,12	0,516	109	12,76	0,502	109	12,59	0,496	109	12,84	0,492
115	13,38	0,527									
120	13,76	0,542	116	14,01	0,551	116	12,79	0,504	116	13,68	0,525
125	14,23	0,560	120	14,40	0,567	120	13,11	0,516	120	14,02	0,538
130	14,75	0,581	125	14,68	0,578	125	13,43	0,529	125	14,45	0,555
133	14,91	0,587	130	15,10	0,595	130	13,74	0,541	130	14,86	0,571
			135	15,57	0,613	135	14,30	0,563	135	15,39	0,592
141	15,68	0,617	140	16,29	0,641	140	14,82	0,583	140	15,79	0,608
145	15,64	0,616	168	17,29	0,681	168	15,82	0,623	168	16,79	0,661
150	15,93	0,627									
155	16,39	0,645									
160	16,74	0,659									
165	17,36	0,683									
170	17,68	0,696									
175	18,41	0,725									
204	19,50	0,768									
Guides, from top			Guides, from top			Guides, from top			Guides, from top		
Nr.	cm	in	Nr.	cm	in	Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0	0	0	0	0	0	0	0
1	17,0	6,7	1	14,4	5,7	1	13,0	5,1	1,0	14,5	5,7
2	35,8	14,1	2	34,5	13,6	2	33,2	13,1	2,0	34,5	13,6
3	58,7	23,1	3	57,5	22,6	3	56,4	22,2	3,0	58,0	22,8
4	85,5	33,7	4	80,5	31,7	4	80,0	31,5	4,0	81,0	31,9
5	116,0	45,7	5	104,0	40,9	5	103,8	40,9	5,0	104,5	41,1
6	150,5	59,3	6	127,5	50,2	6	127,5	50,2	6,0	128,0	50,4
7	187,0	73,6	7	152,5	60,0	7	152,0	59,8	7,0	153,0	60,2
8	220,5	86,8	8	178,0	70,1	8	178,0	70,1	8,0	179,0	70,5
9	254,0	100,0	9	208,5	82,1	9	206,8	81,4	9,0	208,5	82,1
10	289,0	113,8	10	237,2	93,4	10	236,0	92,9	10,0	237,5	93,5
11	323,2	127,2	11	267,0	105,1	11	266,5	104,9	11	268,0	105,5
12	361,5	142,3	12	298,5	117,5	12	297,0	116,9	12	297,5	117,1
13	408,0	160,6	13	330,5	130,1	13	329,5	129,7	13	330,0	129,9

Ferrules 29/64 39/64
Weight 1084 g 38,3 oz

**Hardy
LRH Spey Casting
13' 9" # 10/11**
Nr. H 8355 (1956)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	4,18	0,164
5	4,53	0,178
10	5,17	0,203
15	5,90	0,232
20	6,49	0,255
25	7,07	0,278
30	7,37	0,290
35	7,71	0,304
40	8,04	0,316
45	8,46	0,333
50	8,92	0,351
52	9,13	0,359
60	9,57	0,377
65	9,77	0,385
70	10,08	0,397
75	10,36	0,408
80	10,72	0,422
85	10,88	0,428
90	11,23	0,442
95	11,49	0,452
100	11,86	0,467
105	11,98	0,472
106	12,04	0,474
115	12,36	0,487
120	12,65	0,498
125	12,97	0,511
130	13,29	0,523
135	13,67	0,538
140	14,03	0,552
142	14,12	0,556
165	15,00	0,591

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	8,5	3,3
2	28,6	11,3
3	53,6	21,1
4	82,0	32,3
5	112,8	44,4
6	153,0	60,2
7	188,5	74,2
8	225,0	88,6
9	259,0	102,0
10	312,5	123,0

**Hardy
LRH Spey Casting
13' 9" # 10/11**
Nr. H 26825 (1959)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	4,18	0,164
5	4,52	0,178
10	5,22	0,206
15	5,88	0,231
20	6,50	0,256
25	6,95	0,274
30	7,31	0,288
35	7,63	0,300
40	8,10	0,319
45	8,57	0,337
50	8,95	0,352
52	9,00	0,354
60	9,57	0,377
65	9,90	0,390
70	10,19	0,401
75	10,49	0,413
80	10,76	0,424
85	11,02	0,434
90	11,25	0,443
95	11,67	0,459
100	11,99	0,472
105	12,03	0,474
106	12,08	0,475
115	12,63	0,497
120	13,00	0,512
125	13,23	0,521
130	13,60	0,535
135	13,88	0,547
140	14,18	0,558
142	14,18	0,558
165	15,18	0,598

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	8,2	3,2
2	28,5	11,2
3	50,5	19,9
4	82,0	32,3
5	113,0	44,5
6	153,0	60,2
7	188,0	74,0
8	224,5	88,4
9	258,0	101,6
10	312,5	123,0

**Hardy
LRH Greased Line
13' 0" # 8/9**
Nr. H 21983 (1959)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,13	0,123
5	3,55	0,140
10	4,31	0,170
15	4,91	0,193
20	5,44	0,214
25	6,03	0,237
30	6,34	0,250
35	6,76	0,266
40	7,11	0,280
45	7,39	0,291
49	7,65	0,301
55	8,28	0,326
60	8,67	0,341
65	8,91	0,351
70	9,30	0,366
75	9,51	0,375
80	9,91	0,390
85	10,10	0,398
90	10,41	0,410
95	10,69	0,421
100	11,04	0,435
108	11,03	0,434
110	11,19	0,441
115	11,58	0,456
120	12,15	0,478
125	12,42	0,489
130	12,57	0,495
133	12,80	0,504
156	13,80	0,543

Guides, from top

Nr.	cm	in
0	0	0
1	14,0	5,5
2	29,0	11,4
3	49,2	19,4
4	72,0	28,3
5	95,5	37,6
6	118,5	46,7
7	141,5	55,7
8	166,0	65,4
9	191,0	75,2
10	217,0	85,4
11	245,0	96,5
12	276,0	108,7
13	312,5	123,0

**Hardy
LRH Greased Line
13' 0" # 8/9**
Nr. H 26810 (1959)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,80	0,110
5	3,32	0,131
10	3,93	0,155
15	4,59	0,181
20	5,05	0,199
25	5,54	0,218
30	5,87	0,231
35	6,31	0,248
40	6,71	0,264
45	7,08	0,279
49	7,28	0,287
55	7,97	0,314
60	8,39	0,330
65	8,63	0,340
70	9,03	0,356
75	9,14	0,360
80	9,51	0,374
85	9,74	0,383
90	10,02	0,394
95	10,35	0,407
100	10,51	0,414
108	10,83	0,426
110	11,00	0,433
115	11,20	0,441
120	11,49	0,452
125	11,92	0,469
130	12,31	0,485
133	12,31	0,485
156	13,31	0,524

Guides, from top

Nr.	cm	in
0	0	0
1	13,0	5,1
2	28,4	11,2
3	49,0	19,3
4	71,6	28,2
5	94,8	37,3
6	118,0	46,5
7	140,8	55,4
8	165,0	65,0
9	190,0	74,8
10	216,0	85,0
11	244,0	96,1
12	275,2	108,3
13	311,0	122,4

9

10

11

12

Hardy dark cane
Wye
13' 6" # 10
Nr. H 70133 (1965+)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,27	0,129
5	3,72	0,146
10	4,40	0,173
15	4,94	0,194
20	5,37	0,211
25	5,88	0,231
30	6,39	0,252
35	6,81	0,268
40	7,34	0,289
45	7,74	0,305
50	8,12	0,320
52	8,23	0,324
57	8,82	0,347
60	9,08	0,357
65	9,37	0,369
70	9,66	0,380
75	9,85	0,388
80	10,23	0,403
85	10,44	0,411
90	10,75	0,423
95	11,09	0,437
100	11,40	0,449
105	11,67	0,459
112	11,98	0,472
115	12,33	0,485
120	12,62	0,497
125	13,03	0,513
130	13,45	0,529
135	13,70	0,539
138	14,02	0,552
162	15,00	0,591

Ferrules: 9,19 + 12,17 mm
= app. 23/64 + 33/64

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	13,0	5,1
2	28,5	11,2
3	51,2	20,2
4	79,5	31,3
5	112,5	44,3
6	146,7	57,8
7	183,0	72,0
8	219,0	86,2
9	257,5	101,4
10	308,0	121,3

Hardy
Wye
13' 6" # 10
Nr. H 61028 (1964)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,37	0,133
5	3,62	0,143
10	4,22	0,166
15	4,87	0,192
20	5,40	0,213
25	5,98	0,236
30	6,44	0,254
35	6,91	0,272
40	7,45	0,293
45	7,87	0,310
50	8,32	0,327
52	8,48	0,334
57	8,87	0,349
60	9,20	0,362
65	9,41	0,370
70	9,67	0,381
75	9,91	0,390
80	10,22	0,402
85	10,52	0,414
90	10,75	0,423
95	11,15	0,439
100	11,55	0,455
105	11,85	0,467
112	12,12	0,477
115	12,31	0,485
120	12,73	0,501
125	13,09	0,515
130	13,54	0,533
135	13,97	0,550
138	14,24	0,560
162	15,24	0,600

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	14,0	5,5
2	29,5	11,6
3	52,0	20,5
4	80,0	31,5
5	113,5	44,7
6	149,0	58,7
7	184,8	72,8
8	220,0	86,6
9	259,0	102,0
10	309,0	121,7

Hardy
Wye
13' 6" # 10
Nr. HH C/M (03/1978)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,32	0,131
5	3,80	0,150
10	4,43	0,174
15	5,04	0,199
20	5,61	0,221
25	6,15	0,242
30	6,55	0,258
35	7,01	0,276
40	7,59	0,299
45	8,06	0,317
50	8,37	0,329
52	8,58	0,338
		0,000
57	8,98	0,354
60	9,23	0,364
65	9,51	0,374
70	9,71	0,382
75	10,08	0,397
80	10,36	0,408
85	10,62	0,418
90	10,93	0,430
95	11,19	0,441
100	11,52	0,454
105	11,84	0,466
		0,000
112	12,09	0,476
115	12,34	0,486
120	12,65	0,498
125	13,24	0,521
130	13,53	0,533
135	14,04	0,553
138	14,09	0,555
162	15,09	0,594

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	13,5	5,3
2	28,0	11,0
3	50,0	19,7
4	77,5	30,5
5	111,2	43,8
6	148,3	58,4
7	183,5	72,2
8	220,5	86,8
9	258,0	101,6
10	309,5	121,9

Hardy
Wye
13' 6" # 10
Nr. H 8685 (1956)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,29	0,129
5	3,60	0,142
10	4,32	0,170
15	4,86	0,191
20	5,40	0,212
25	5,79	0,228
30	6,22	0,245
35	6,69	0,264
40	7,19	0,283
45	7,52	0,296
50	7,94	0,313
52	8,23	0,324
57	8,84	0,348
60	9,02	0,355
65	9,65	0,380
70	10,00	0,394
75	10,45	0,411
80	10,69	0,421
85	10,62	0,418
90	10,69	0,421
95	10,98	0,432
100	11,17	0,440
105	11,42	0,449
112	11,92	0,469
115	12,09	0,476
120	12,50	0,492
125	12,92	0,509
130	13,29	0,523
135	13,76	0,542
138	13,76	0,542
162	14,76	0,581

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	13,0	5,1
2	28,5	11,2
3	51,5	20,3
4	79,5	31,3
5	113,5	44,7
6	148,0	58,3
7	184,0	72,4
8	220,0	86,6
9	259,0	102,0
10	306,5	120,7

13

**Hardy
Wye
13' 6" # 10**
post numbered

without varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,20	0,126
5	3,65	0,144
10	4,30	0,169
15	4,97	0,196
20	5,60	0,220
25	6,08	0,239
30	6,46	0,254
35	6,94	0,273
40	7,50	0,295
45	7,95	0,313
50	8,25	0,325
60	9,00	0,354
65	9,30	0,366
70	9,55	0,376
75	9,90	0,390
80	10,30	0,406
85	10,48	0,413
90	10,72	0,422
95	11,00	0,433
100	11,35	0,447
105	11,80	0,465
115	12,30	0,484
120	12,60	0,496
125	13,00	0,512
130	13,50	0,531
135	13,90	0,547
162	14,90	0,547

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	10,9	4,3
2	26,4	10,4
3	44,5	17,5
4	65,5	25,8
5	91,4	36,0
6	122,4	48,2
7	150,4	59,2
8	178,6	70,3
9	209,6	82,5
10	248,9	98,0

14

**Hardy
Wye
12' 6" # 9**
Nr. E 98184 (1955)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,14	0,124
5	3,75	0,148
10	4,30	0,169
15	4,83	0,190
20	5,22	0,206
25	5,54	0,218
30	5,90	0,232
35	6,45	0,254
40	6,92	0,272
45	7,35	0,289
48	7,55	0,297
55	8,40	0,331
60	8,72	0,343
65	9,15	0,360
70	9,47	0,373
75	9,76	0,384
80	10,02	0,394
85	10,33	0,407
90	10,54	0,415
95	10,81	0,426
105	11,38	0,448
110	11,57	0,456
115	11,81	0,465
120	12,05	0,474
125	12,42	0,489
150	13,42	0,528

Ferrules: 8,14 + 11,62 mm
= app. 21/64 + 29/64

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	11,5	4,5
2	29,6	11,7
3	53,0	20,9
4	79,5	31,3
5	107,7	42,4
6	136,5	53,7
7	169,1	66,6
8	202,0	79,5
9	235,5	92,7
10	279,2	109,9

15

**Hardy
Wye
12' 6" # 9**
Nr. H 13728 (1957)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,11	0,122
5	3,57	0,140
10	4,30	0,169
15	4,93	0,194
20	5,41	0,213
25	5,77	0,227
30	6,12	0,241
35	6,55	0,258
40	6,91	0,272
45	7,29	0,287
48	7,52	0,296
55	8,30	0,327
60	8,60	0,338
65	8,95	0,352
70	9,35	0,368
75	9,60	0,378
80	9,92	0,391
85	10,24	0,403
90	10,54	0,415
95	10,91	0,430
105	11,28	0,444
110	11,40	0,449
115	11,83	0,466
120	12,15	0,478
125	12,41	0,489
150	13,40	0,528

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	11,5	4,5
2	29,6	11,7
3	53,0	20,9
4	79,5	31,3
5	107,7	42,4
6	136,5	53,7
7	169,1	66,6
8	202,0	79,5
9	235,5	92,7
10	279,2	109,9

16

**Hardy
Wye
12' 6" # 9**
Nr. J 2903 (09/1976)

J/D

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	2,95	0,116
5	3,36	0,132
10	4,00	0,157
15	4,72	0,186
20	5,28	0,208
25	5,63	0,222
30	6,04	0,238
35	6,52	0,256
40	6,81	0,268
45	7,16	0,282
48	7,51	0,296
55	8,15	0,321
60	8,61	0,339
65	8,89	0,350
70	9,28	0,365
75	9,54	0,376
80	9,87	0,389
85	10,21	0,402
90	10,47	0,412
95	10,68	0,420
105	11,23	0,442
110	11,71	0,461
115	11,75	0,462
120	12,03	0,474
125	12,29	0,484
150	13,46	0,530

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	14,6	5,7
2	32,5	12,8
3	52,5	20,7
4	78,3	30,8
5	106,7	42,0
6	136,7	53,8
7	167,2	65,8
8	201,2	79,2
9	237,8	93,6
10	286,8	112,9

17

**Hardy
Wye
12' 6" # 9**
Nr. J 5356 (05/1978)
E/M
over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,17	0,125
5	3,53	0,139
10	4,24	0,167
15	5,01	0,197
20	5,58	0,219
25	6,01	0,237
30	6,45	0,254
35	6,88	0,271
40	7,14	0,281
45	7,54	0,297
48	7,81	0,307
55	8,29	0,326
60	8,61	0,339
65	9,02	0,355
70	9,37	0,369
75	9,62	0,379
80	10,07	0,396
85	10,34	0,407
90	10,60	0,417
95	10,64	0,419
105	11,55	0,455
110	12,03	0,473
115	12,25	0,482
120	12,59	0,496
125	12,52	0,493
150	13,52	0,532

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	14,0	5,5
2	32,0	12,6
3	51,8	20,4
4	77,7	30,6
5	106,0	41,7
6	136,0	53,5
7	166,5	65,6
8	200,3	78,9
9	237,2	93,4
10	285,5	112,4

18

**Hardy
Wye
11' 0" # 7**
2 piece
over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,50	0,098
5	3,10	0,122
10	3,60	0,142
15	4,16	0,164
20	4,80	0,189
25	5,30	0,209
30	5,80	0,228
35	6,00	0,236
40	6,10	0,240
45	6,30	0,248
50	6,80	0,268
55	7,20	0,283
60	7,60	0,299
65	8,00	0,315
70	8,40	0,331
75	8,80	0,346
80	9,20	0,362
85	9,60	0,378
90	9,80	0,386
95	10,20	0,402
100	10,60	0,417
105	10,70	0,421
110	11,00	0,433
115	11,20	0,441
132	12,00	0,472

19

**Hardy
Wye
10' 6" # 7**
Nr. H 19515 (1958)
over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,81	0,111
5	3,24	0,128
10	3,91	0,154
15	4,45	0,175
20	4,76	0,187
25	5,04	0,198
30	5,31	0,209
35	5,59	0,220
40	5,99	0,236
50	7,22	0,284
55	7,50	0,295
60	7,94	0,313
65	8,19	0,322
70	8,56	0,337
75	8,87	0,349
80	9,09	0,358
84	9,51	0,374
90	10,21	0,402
95	10,39	0,409
100	10,74	0,423
105	11,19	0,441
110	11,51	0,453
126	12,30	0,484

20

**Hardy
AHE Wood Nr. 2
12' 0" # 9**
(1964)
over varnish

Length (in)	Diam. (mm)	Diam. (in)
0	2,46	0,097
5	2,90	0,114
10	3,43	0,135
15	4,09	0,161
20	4,57	0,180
25	5,03	0,198
30	5,49	0,216
35	5,92	0,233
40	6,35	0,250
45	6,71	0,264
50	7,09	0,279
55	7,37	0,290
60	7,70	0,303
65	8,05	0,317
70	8,38	0,330
75	8,71	0,343
80	8,97	0,353
85	9,09	0,358
90	9,32	0,367
95	9,55	0,376
110	10,03	0,395
105	10,67	0,420
110	10,95	0,431
115	11,43	0,450
120	11,79	0,464
125	12,12	0,477
144	12,80	0,504

21

**Hardy
Hollolight
12' 6"**

Nr. H 28681 (1960)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	3,33	0,131
6	3,89	0,153
10	4,59	0,181
15	5,12	0,202
20	5,47	0,215
25	5,92	0,233
30	6,24	0,246
35	6,68	0,263
40	7,02	0,276
45	7,46	0,294
48	7,62	0,300
55	8,34	0,328
60	8,81	0,347
65	9,18	0,361
70	9,47	0,373
75	9,77	0,385
80	10,10	0,398
85	10,46	0,412
90	10,89	0,429
95	11,16	0,439
98	11,24	0,443
105	12,30	0,484
110	12,50	0,492
115	12,82	0,505
120	12,98	0,511
125	13,20	0,520
150	14,10	0,555

Ferrules	20/64	29/64
Weight	460 g	16,2 oz

Nr.	cm	in
0	0,0	0,0
1	12,5	4,3
2	30,0	10,4
3	53,5	18,3
4	80,0	28,5
5	108,2	39,6
6	137,0	54,1
7	169,2	66,3
8	202,2	78,5
9	235,4	92,3
10	286,5	108,5

22

**Hardy
Gold Medal
13' 0"**

over varnish

Length (in)	Diam. (mm)	Diam. (in)
0	2,80	0,110
5	3,18	0,125
10	3,60	0,142
15	4,47	0,176
20	4,91	0,193
25	5,12	0,202
30	5,50	0,217
35	5,90	0,232
40	6,28	0,247
45	6,71	0,264
50	7,10	0,280
55	7,21	0,284
60	7,64	0,301
65	8,00	0,315
70	8,38	0,330
75	8,74	0,344
80	9,08	0,357
85	9,44	0,372
90	9,73	0,383
95	9,99	0,393
100	10,20	0,402
105	10,41	0,410
110	10,46	0,412
115	10,64	0,419
120	11,07	0,436
125	11,31	0,445
130	11,48	0,452
156	12,00	0,472

Ferrules	20/64	28/64
Weight	432 g	15,25 oz

Nr.	cm	in
0	0,0	0,0
1	17,1	6,8
2	47,0	18,5
3	77,5	30,5
4	114,3	45,0
5	155,6	61,3
6	198,8	78,3
7	248,0	97,6
8	294,6	116,0

23

**Hardy
Roach Perfection Rod
11'0"**

over varnish

Length (in)	Diam. (mm)	Diam. (in)
0,0	2,16	0,085
6,0	2,54	0,100
12,0	3,02	0,119
18,0	3,73	0,147
24,0	4,29	0,169
30,0	5,05	0,199
36,0	5,44	0,214
42,0	5,66	0,223
48,0	6,22	0,245
54,0	6,60	0,260
60,0	7,06	0,278
66,0	7,44	0,293
72,0	8,36	0,329
78,0	8,89	0,350
84,0	9,22	0,363
90,0	9,75	0,384
96,0	10,54	0,415
102,0	10,95	0,431
108,0	11,38	0,448
114,0	11,94	0,470
132,0	12,80	0,504

Handle length: 58,4 cm = 23 in
Ferrule: 22/64

24

**Hardy
Murdoch
10'6" s.c. (steel centre)**

Nr. E 78678 (1951)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,60	0,142
5	4,10	0,161
10	5,03	0,198
15	5,81	0,229
20	6,58	0,259
25	7,12	0,280
30	7,60	0,299
35	8,15	0,321
39	8,57	0,337
45	9,15	0,360
50	9,59	0,378
55	9,96	0,392
60	10,17	0,400
65	10,64	0,419
70	11,00	0,446
75	11,29	0,445
80	11,65	0,459
88	12,45	0,490
90	12,73	0,501
95	13,12	0,517
98	13,35	0,526
126	14,50	0,571

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	13,2	5,2
2	31,2	12,3
3	54,3	21,4
4	80,5	31,7
5	115,5	45,5
6	153,1	60,3
7	192,8	75,9
8	232,5	91,5

Handle length: 71 cm = 28 in
Ferrules: 8,86 + 11,63 mm
Stripper ID: 8,6 mm

"The Celebrated Spinning Rod"
For Salmon, Masheer, Pike, Etc.

25
Johan Nygaardsvold

26
Johan Nygaardsvold

27
Atle Venn

28
Atle Venn

Hørgård Namsen 15' 10" # 11/12			Hørgård Orkla 14' 6" # 10			Hørgård Orkla 14' 6" # 10			Hørgård Alta 14' 0" # 10 Nr. 101433 over varnish		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
1	4,80	0,189	1	2,94	0,116	0	3,00	0,118	1	3,30	0,125
5	5,30	0,209	5	3,54	0,139	5	3,68	0,145	5	3,75	0,145
10	6,00	0,236	10	4,32	0,170	10	4,30	0,169	10	4,35	0,166
15	6,70	0,264	15	4,98	0,196	15	4,90	0,193	15	4,70	0,186
20	7,35	0,289	20	5,48	0,216	20	5,40	0,213	20	5,05	0,210
25	7,75	0,305	25	5,97	0,235	25	5,87	0,231	25	5,00	0,225
30	8,15	0,321	30	6,35	0,250	30	6,28	0,247	30	5,45	0,244
35	8,37	0,330	35	6,77	0,266	35	6,70	0,264	35	5,95	0,264
40	8,50	0,335	40	7,13	0,281	40	7,12	0,280	40	6,20	0,280
45	8,60	0,339	45	7,56	0,297	45	7,53	0,296	45	6,65	0,300
50	8,70	0,343	50	8,07	0,318	50	7,90	0,311	50	7,10	0,315
55	8,70	0,343	55	8,45	0,332	55	8,23	0,324			
60	8,80	0,346				59	8,50	0,335	60	9,15	0,355
			65	9,92	0,391				65	9,80	0,380
65	10,30	0,406	70	10,37	0,408	64	9,65	0,380	70	10,20	0,398
70	10,90	0,429	75	10,90	0,429	69	10,30	0,406	75	10,50	0,410
75	11,60	0,457	80	11,30	0,445	74	10,72	0,422	80	10,95	0,430
80	12,00	0,472	85	11,85	0,467	79	11,13	0,438	85	11,48	0,450
85	12,50	0,492	90	12,15	0,478	84	11,48	0,452	90	11,90	0,460
90	13,00	0,512	95	12,40	0,488	89	11,72	0,461	95	12,35	0,477
95	13,20	0,520	100	12,70	0,500	94	12,04	0,474	100	12,80	0,500
100	13,50	0,531	105	12,90	0,508	99	12,25	0,482	105	13,25	0,524
105	13,70	0,539	110	13,10	0,516	104	12,46	0,491			
110	13,90	0,547				109	12,68	0,499	115	14,10	0,550
115	14,00	0,551	120	14,45	0,569	114	12,77	0,503	120	14,55	0,567
120	14,00	0,551	125	15,10	0,594				125	14,85	0,580
			130	15,80	0,622	117	13,50	0,531	130	15,40	0,597
130	15,60	0,614	135	16,40	0,646	122	14,33	0,564	135	15,70	0,615
135	15,90	0,626	140	16,80	0,661	127	15,11	0,595	140	16,15	0,633
140	16,10	0,634	145	17,25	0,679	132	15,65	0,616	168	17,15	0,660
145	16,40	0,646	150	17,50	0,689	137	16,19	0,637			
150	16,56	0,652	174	18,50	0,689	142	16,70	0,657			
155	16,80	0,661				147	17,20	0,677			
160	17,10	0,673				152	17,58	0,692			
190	18,10	0,673				174	18,50	0,709			
Guides, from top			Guides, from top			Guides, from top			Guides, from top		
Nr.	cm	in	Nr.	cm	in	Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0,0	0,0	0	0,0	0,0	0	0,0	0,0
1	20,0	7,9	1	15,0	5,9	1	17,8	7,0	1	27,0	10,6
2	44,0	17,3	2	33,0	13,0	2	39,4	15,5	2	65,0	25,6
3	72,0	28,3	3	60,0	23,6	3	66,0	26,0	3	112,0	44,1
4	104,0	40,9	4	92,0	36,2	4	94,0	37,0	4	161,0	63,4
5	140,0	55,1	5	132,0	52,0	5	124,5	49,0	5	211,0	83,1
6	178,0	70,1	6	173,0	68,1	6	152,4	60,0	6	260,0	102,4
7	217,0	85,4	7	216,0	85,0	7	182,9	72,0	7	320,0	126,0
8	257,0	101,2	8	262,0	103,1	8	213,4	84,0			
9	297,0	116,9	9	309,0	121,7	9	246,4	97,0			
10	340,0	133,9	10	355,0	139,8	10	285,8	112,5			
11	385,0	151,6				11	318,8	125,5			

29
Atle Venn

30
Morten Lövstad

31
Atle Venn

32
Danny Twang
PowerFibers # 2, Jan. 2001

Hørgård Sona 13' 6" # 10 Nr. 45663 over varnish			Hørgård H.B. 12' 9" # 9 Nr. 96124 over varnish			Hørgård H.C. 12' 0" # 9 Nr. 118809 over varnish			Hørgård Tana 13' 6" # 10 over varnish		
Length (in)	Diam. (mm)	Diam. (in)	Länge (in)	Diam. (mm)	Diam. (in)	Länge (in)	Diam. (mm)	Diam. (in)	Länge (in)	Diam. (mm)	Diam. (in)
0	3,30	0,130	2	3,20	0,126	1	2,83	0,111	1,5	2,54	0,100
5	3,72	0,146	5	3,35	0,132	5	3,11	0,122	5	3,05	0,120
10	4,15	0,163	10	3,85	0,152	10	3,75	0,148	10	3,81	0,150
15	4,55	0,179	15	4,38	0,172	15	4,24	0,167	15	4,32	0,170
20	5,25	0,207	20	4,73	0,186	20	4,67	0,184	20	5,13	0,202
25	5,55	0,219	25	5,13	0,202	25	5,12	0,201	25	5,46	0,215
30	6,03	0,237	30	5,54	0,218	30	5,50	0,216	30	5,77	0,227
35	6,50	0,256	35	5,99	0,236	35	5,98	0,235	35	6,02	0,237
40	6,75	0,266	40	6,44	0,254	40	6,39	0,251	40	6,40	0,252
45	7,12	0,280	45	6,93	0,273	45	6,81	0,268	45	6,86	0,270
50	7,58	0,298	48,5	7,47	0,294				50	7,26	0,286
						55	7,66	0,302	53,75	7,52	0,296
60	8,58	0,338	55	7,91	0,311	60	8,05	0,317			
65	9,08	0,357	60	8,20	0,323	65	8,41	0,331	57,75	8,13	0,320
70	9,20	0,362	65	8,64	0,340	70	8,72	0,343	60	8,43	0,332
75	9,40	0,370	69,5	8,79	0,346	75	9,09	0,358	65	8,94	0,352
80	9,82	0,387	75	9,20	0,362	80	9,45	0,372	70	9,53	0,375
85	10,28	0,405	80	9,53	0,375	85	9,74	0,383	75	9,93	0,391
90	10,50	0,413	85	9,87	0,389	90	10,17	0,400	80	10,39	0,409
95	10,90	0,429	90	10,19	0,401	95	10,49	0,413	85	10,80	0,425
100	11,35	0,447	94,5	10,43	0,411	100	10,59	0,417	90	11,23	0,442
			99	10,74	0,423				95	11,63	0,458
110	12,54	0,494				105	11,40	0,449	100	11,99	0,472
115	12,98	0,511	106	11,73	0,462	110	12,00	0,472	105	12,60	0,496
120	13,28	0,523	110	12,00	0,472	115	12,55	0,494	106,5	12,70	0,500
125	13,75	0,541	115	12,13	0,478	120	12,83	0,505			
130	14,30	0,563	120	12,61	0,496	125	13,27	0,522	113	13,08	0,515
135	14,60	0,575	125	13,07	0,515	144	14,27	0,562	115	13,89	0,547
162	15,60	0,614	128	13,26	0,522				120	14,33	0,564
			153	14,50	0,57				125	14,81	0,583
						weight	536 g	18,9 oz	130	15,24	0,600
									131,5	15,49	0,608
									162	16,70	0,635
Guides, from top			Guides, from top			Guides, from top					
Nr.	cm	in	Nr.	cm	in	Nr.	cm	in			
0	0,0	0,0	0	0,0	0,0	0	0,0	0,0			
1	17,8	7,0	1	16,2	6,4	1	16,5	6,5			
2	39,4	15,5	2	35,2	13,9	2	39,5	15,6			
3	66,0	26,0	3	61,9	24,4	3	62,8	24,7			
4	94,0	37,0	4	89,2	35,1	4	86,0	33,9			
5	124,5	49,0	5	117,8	46,4	5	108,8	42,8			
6	152,4	60,0	6	147,3	58,0	6	136,6	53,8			
7	182,9	72,0	7	178,8	70,4	7	159,6	62,8			
8	213,4	84,0	8	209,9	82,6	8	183,6	72,3			
9	246,4	97,0	9	242,3	95,4	9	208,4	82,0			
10	285,8	112,5	10	275,0	108,3	10	234,1	92,2			
11	318,8	125,5	11	310,5	122,3	11	262,6	103,4			
						12	296,6	116,8			

Sharpe's Spliced 12' 0" # 8			Sharpe's Spliced 12' 0" # 8			Sharpe's Spliced 13' 0" # 9			Sharpe's Spliced 13' 0" # 9		
Nr. 261 380 g 13,4 oz impregnated			Nr. 612 296 401 g 14,1 oz Dec. 66, Nr. 296 impregnated			Nr. 3.5.69 485 g 17,1 oz May 73, Nr. 69 impregnated			Nr. 7.1.58 401 g 14,1 oz Jan. 77, Nr. 58 impregnated		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
2	2,88	0,113	2	3,40	0,134	2	3,60	0,142	2	3,71	0,146
5	3,34	0,131	5	3,70	0,146	5	3,99	0,157	5	4,06	0,160
10	3,94	0,155	10	4,25	0,167	10	4,42	0,174	10	4,56	0,180
15	4,56	0,180	15	4,73	0,186	15	4,92	0,194	15	4,90	0,193
20	5,04	0,199	20	5,15	0,203	20	5,37	0,211	20	5,49	0,216
25	5,59	0,220	25	5,52	0,217	25	5,89	0,232	25	6,02	0,237
30	6,03	0,237	30	5,99	0,236	30	6,38	0,251	30	6,48	0,255
35	6,64	0,261	35	6,55	0,258	35	6,81	0,268	35	6,92	0,273
40	7,12	0,280	40	7,12	0,280	40	7,29	0,287	40	7,37	0,290
45	7,99	0,314	45	8,36	0,329	45	7,81	0,307	45	7,90	0,311
46	9,81	0,386	46,5	9,75	0,384	49	9,98	0,393	47	8,19	0,323
47	10,30	0,406	47	10,28	0,405	50	10,60	0,417	49	10,33	0,407
48	10,45	0,411	48	10,62	0,418	51	11,40	0,449	51	11,10	0,437
49	10,37	0,408	49	10,74	0,423	53	11,80	0,465	53	11,17	0,440
50	10,35	0,407	50	10,73	0,422	55	11,80	0,465	55	11,18	0,440
51	10,16	0,400	51	10,65	0,419	57	11,60		57	11,03	0,434
52	10,18	0,401	52	10,50	0,413	58	11,50	0,453	59	9,44	0,372
53	10,08	0,397	53	9,81	0,386	60	9,20	0,362	60	8,91	0,351
54	9,70	0,382	54	8,92	0,351	65	9,00	0,354	65	9,07	0,357
55	8,57	0,337	55	8,44	0,332	70	9,20	0,362	70	9,24	0,364
60	8,68	0,342	60	8,32	0,328	75	9,50	0,374	75	9,60	0,378
65	8,94	0,352	65	8,55	0,337	80	9,75	0,384	80	9,73	0,383
70	9,04	0,356	70	8,86	0,349	85	10,05	0,396	85	10,07	0,396
75	9,40	0,370	75	9,20	0,362	90	10,50	0,413	90	10,27	0,404
80	9,78	0,385	80	9,40	0,370	94	11,30	0,445	95	11,34	0,446
85	10,15	0,400	85	9,72	0,383	96	12,50	0,492	97	13,57	0,534
87	10,17	0,400	88	10,25	0,404	98	14,00	0,551	99	14,35	0,565
88	10,38	0,409	89,5	12,08	0,476	100	14,50	0,571	101	14,75	0,581
89	11,38	0,448	90	12,40	0,488	102	14,60	0,575	103	14,84	0,584
90	12,62	0,497	91	12,60	0,496	105	14,80	0,583	105	14,82	0,584
91	13,02	0,512	92	13,40	0,528	110	13,30	0,524	107	14,57	0,574
92	13,17	0,519	93	13,83	0,544	117	12,60	0,496	109	13,58	0,535
93	13,09	0,515	94	14,02	0,552	122	13,05	0,514	110	13,07	0,514
94	12,94	0,509	95	14,19	0,559	127	13,30	0,524	115	12,40	0,488
95	12,90	0,508	96	14,03	0,552	132	13,80	0,543	120	12,74	0,502
96	12,80	0,504	97	13,90	0,547	156	14,60	0,575	125	13,11	0,516
97	12,61	0,497	98	13,81	0,544				130	13,39	0,527
98	12,50	0,492	99	13,65	0,537				132	13,64	0,537
99	12,36	0,487	103	11,84	0,466				156	14,40	0,567
100	12,00	0,473	108	11,85	0,467						
101	11,61	0,457	113	12,24	0,482						
102	11,12	0,438	118	12,45	0,490						
103	10,69	0,421	123	13,32	0,524						
105	10,67	0,420	144	14,10	0,5551						
110	10,97	0,432									
115	11,32	0,446									
120	11,62	0,457									
123	12,03	0,474									
144	12,80	0,5039									

Sharpe's Spliced 14' 0" # 10/11			Sharpe's Spliced 14' 0" # 10/11			Sharpe's Spliced 15' 0" # 11			Sharpe's Spliced 15' 0" # 11		
Nr. 782 July 1982 impregnated			Nr. 5162 1961 impregnated			Nr. 185 impregnated			735 g 25,9 oz impregnated		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
2	3,70	0,146	2	3,40	0,134	2	3,77	0,148	2	3,70	0,146
5	4,08	0,161	5	3,71	0,146	5	4,13	0,162	5	4,70	0,185
10	4,48	0,177	10	4,30	0,169	10	4,75	0,187	10	5,00	0,197
15	4,98	0,196	15	4,85	0,191	15	5,35	0,211	15	5,40	0,213
20	5,47	0,215	20	5,25	0,207	20	5,86	0,231	20	5,81	0,229
25	5,94	0,234	25	5,75	0,226	25	6,33	0,249	25	6,37	0,251
30	6,38	0,251	30	6,22	0,245	30	6,80	0,268	30	6,79	0,267
35	6,84	0,269	35	6,57	0,259	35	7,34	0,289	35	7,32	0,288
40	7,32	0,288	40	6,95	0,274	40	7,82	0,308	40	7,85	0,309
45	7,82	0,308	45	7,29	0,287	45	8,40	0,331	45	8,38	0,330
50	8,32	0,328	50	7,80	0,307	50	8,91	0,351	50	8,85	0,348
52	8,61	0,339	52	11,14	0,439	55	9,47	0,373	55	9,38	0,369
53	9,90	0,390	53	11,33	0,446	56	9,68	0,381	58	11,70	0,461
54	10,48	0,412	54	11,44	0,450	57	10,85	0,427	59	12,90	0,508
55	11,29	0,445	55	11,21	0,441	58	11,49	0,452	60	13,10	0,516
56	11,40	0,449	56	10,95	0,431	59	12,00	0,472	61	13,30	0,524
57	11,67	0,459	57	10,91	0,430	60	12,25	0,482	62	13,50	0,531
58	11,73	0,462	58	10,95	0,431	61	12,35	0,486	63	13,50	0,531
59	11,70	0,461	59	11,08	0,436	62	12,41	0,488	64	13,50	0,531
60	11,59	0,456	60	11,13	0,438	63	12,28	0,483	65	13,50	0,531
61	11,27	0,444	65	9,38	0,369	64	12,11	0,477	66	13,50	0,531
62	11,11	0,437	70	9,63	0,379	65	12,07	0,475	67	13,40	0,528
63	10,28	0,405	75	10,00	0,394	66	12,03	0,473	68	13,20	0,520
64	10,13	0,399	80	10,23	0,403	67	12,02	0,473	70	11,10	0,437
65	9,77	0,385	85	10,52	0,414	68	11,82	0,465	75	11,00	0,433
70	9,98	0,393	90	10,80	0,425	69	11,31	0,445	80	11,52	0,454
75	10,17	0,400	95	10,99	0,433	70	10,67	0,420	85	11,80	0,465
80	10,42	0,410	100	11,30	0,449	75	10,41	0,410	90	12,10	0,476
85	10,57	0,416	104	11,40	0,531	80	10,67	0,420	95	12,65	0,498
90	10,87	0,428	105	13,50	0,579	85	10,90	0,429	100	13,00	0,512
95	11,26	0,443	106	14,70	0,591	90	11,17	0,440	105	13,10	0,516
100	11,50	0,453	107	15,02	0,601	95	11,46	0,451	110	14,10	0,555
105	12,19	0,480	108	15,26	0,604	100	11,73	0,462	112	16,00	0,630
106	13,13	0,517	109	15,33	0,609	105	11,98	0,472	113	18,00	0,709
107	14,17	0,558	110	15,46	0,613	109	12,61	0,496	114	18,50	0,728
108	14,57	0,573	111	15,56	0,610	110	13,23	0,521	115	18,80	0,740
109	14,79	0,582	112	15,50	0,609	111	14,19	0,559	116	18,99	0,748
110	15,12	0,595	113	15,48	0,571	112	15,39	0,606	117	19,10	0,752
111	15,26	0,601	118	14,50	0,480	113	15,66	0,617	118	19,19	0,756
112	15,11	0,595	120	12,20	0,480	114	16,39	0,645	119	19,35	0,762
113	14,99	0,590	125	12,70	0,500	115	16,50	0,650	120	19,50	0,768
114	14,93	0,588	130	13,07	0,515	116	16,60	0,653	121	19,50	0,768
115	14,65	0,577	135	13,51	0,532	117	16,75	0,660	122	19,50	0,768
116	14,61	0,575	140	13,80	0,543	118	16,99	0,669	123	19,30	0,760
117	14,33	0,564	144	14,00	0,551	119	16,94	0,667	124	19,00	0,748
118	13,83	0,544	168	14,80	0,583	120	16,94	0,667	125	18,80	0,740
119	13,46	0,530				121	16,99	0,669	126	16,26	0,640
120	13,20	0,520				122	16,87	0,664	129	16,00	0,630
125	13,35	0,525				123	16,76	0,660	135	15,77	0,621
130	13,63	0,537				124	16,41	0,646	140	15,88	0,625
135	14,03	0,552				125	16,23	0,639	145	16,09	0,633
140	14,45	0,569				126	16,15	0,636	150	16,24	0,639
144	14,75	0,581				127	15,89	0,626	154	16,35	0,644
168	15,60	0,614				128	15,03	0,592	180	17,35	0,683
						129	14,48	0,570			
						130	14,16	0,557			
						135	14,44	0,569			
						140	14,68	0,578			
						145	14,84	0,584			
						150	15,37	0,605			
						152	15,44	0,608			
						180	16,50	0,650			

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Ulf Löfdal

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Ulf Löfdal

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Sharpe's Spliced 16' 0" # 11/12			Sharpe's Spliced 13' 0" # 9			Sharpe's Scottie Ferruled 10' 6" # 9			Sharpe's Aberdeen Ferruled 11' 0" # 8		
impregnated			impregnated			impregnated			impregnated		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
2	3,46	0,136	1	3,56	0,140	1	3,09	0,122	1	2,64	0,104
5	3,95	0,156	5	3,92	0,154	5	3,53	0,139	5	3,05	0,120
10	4,68	0,184	10	4,37	0,172	10	4,04	0,159	10	3,58	0,141
15	5,36	0,211	15	4,90	0,193	15	4,42	0,174	15	4,04	0,159
20	5,95	0,234	20	5,30	0,209	20	4,83	0,190	20	4,44	0,175
25	6,44	0,254	25	5,90	0,232	25	5,38	0,212	25	4,80	0,189
30	6,98	0,275	30	6,33	0,249	30	5,77	0,227	30	5,23	0,206
35	7,61	0,300	35	6,80	0,268	35	6,12	0,241	35	5,69	0,224
40	8,12	0,320	40	7,20	0,283	40	6,68	0,263	40	6,12	0,241
45	8,62	0,339	45	7,77	0,306				45	6,43	0,253
50	9,27	0,365	48	8,05	0,317	45	7,04	0,277			
55	9,78	0,385				50	7,43	0,293	50	6,78	0,267
60	10,37	0,408	61	8,80	0,346	55	7,82	0,308	55	7,21	0,284
60,5	10,45	0,411	65	8,98	0,354	60	8,25	0,325	60	7,65	0,301
62	11,78	0,464	70	9,27	0,365	65	8,38	0,330	65	7,95	0,313
65	12,70	0,500	75	9,52	0,375	70	8,61	0,339	70	8,08	0,318
67	12,80	0,504	80	9,80	0,386	75	8,86	0,349	75	8,56	0,337
69	12,80	0,504	85	10,06	0,396	80	9,45	0,372	80	8,74	0,344
70	12,50	0,492	90	10,35	0,407				85	9,12	0,359
72	12,02	0,473	95	10,65	0,419	85	9,54	0,376			
74	10,94	0,431				90	9,70	0,382	90	9,55	0,376
77	10,98	0,432	116	12,20	0,480	100	10,08	0,397	95	9,83	0,387
82	11,22	0,442	120	12,47	0,491	105	10,36	0,408	100	10,21	0,402
87	11,41	0,449	125	12,80	0,504	110	10,74	0,423	105	10,77	0,424
92	11,46	0,451	130	13,20	0,520	115	11,19	0,441	110	11,10	0,437
97	11,76	0,463	135	13,47	0,530	120	11,51	0,453	115	11,71	0,461
102	11,90	0,469	156	14,10	0,530	125	11,84	0,466	120	12,09	0,476
107	12,34	0,486				126	12,16	0,479	125	12,47	0,491
112	12,75	0,502							130	12,85	0,506
116,75	12,92	0,509							132	13,00	0,512
117	13,02	0,513									
119,75	15,58	0,613									
122	16,13	0,635									
124	16,60	0,654									
126	17,00	0,669									
128	17,10	0,673									
130	17,20	0,677									
132	16,90	0,665									
134,75	15,77	0,621									
135,5	15,10	0,594									
136	14,77	0,581									
140,5	15,02	0,591									
145,5	14,95	0,589									
150,5	15,08	0,594									
155,5	15,24	0,600									
160,5	15,54	0,612									
161	15,54	0,612									
192	16,50	0,650									

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	19,0	7,5
2	38,0	15,0
3	58,0	22,8
4	79,0	31,1
5	100,0	39,4
6	124,0	48,8
7	155,0	61,0
8	185,0	72,8
9	214,0	84,3
10	243,0	95,7
11	285,0	112,2
12	315,0	124,0

Sharpe's Spliced 12' 0" # 8/9		
impregnated		
Length (in)	Diam. (mm)	Diam. (in)
1	2,92	0,115
5	3,60	0,142
10	4,20	0,165
15	4,86	0,191
20	5,20	0,205
25	5,75	0,226
30	6,04	0,238
35	6,55	0,258
40	7,16	0,282
45	7,65	0,301
58	8,80	0,346
65	9,01	0,355
70	9,12	0,359
75	9,35	0,368
80	9,71	0,382
85	10,08	0,397
88	10,28	0,405
105	10,87	0,428
110	11,00	0,433
115	11,35	0,447
120	11,60	0,457
125	11,93	0,470
144	12,60	0,470
Guides, from top		
Nr.	cm	in
0	0	0,0
1	12,5	4,9
2	31,0	12,2
3	37,5	14,8
4	57,0	22,4
5	77,0	30,3
6	97,5	38,4
7	130,5	51,4
8	155,0	61,0
9	180,5	71,1
10	207,5	81,7
11	247,5	97,4
12	277,0	109,1

Guide Positions for rod numbers**33 + 34****35 + 36**

Sharpe's Spliced 12' 0"			Sharpe's Spliced 13' 0"		
Guides, from top			Guides, from top		
Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0,0	0,0
1	13,8	5,1	1	19,2	7,6
2	30,5	11,7	2	37,5	14,8
3	49,5	19,3	3	58,4	23,0
4	69,0	27,2	4	78,5	30,9
5	90,0	35,4	5	99,5	39,2
6	111,5	43,9	6	122,5	48,2
7	140,5	55,3	7	152,5	60,0
8	168,5	66,3	8	182,9	72,0
9	197,5	77,0	9	211,0	83,1
10	227,5	89,2	10	239,5	94,3
11	258,5	101,8	11	280,5	110,4
12	291,0	114,6	12	309,5	121,9

37 + 38**39 + 40**

Sharpe's Spliced 14' 0"			Sharpe's Spliced 15' 0"		
Guides, from top			Guides, from top		
Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0,0	0,0
1	16,5	6,5	1	16,0	6,3
2	38,1	15,0	2	35,0	13,8
3	62,2	24,5	3	58,5	23,0
4	91,4	36,0	4	84,0	33,1
5	123,2	48,5	5	109,2	43,0
6	160,0	63,0	6	138,2	54,4
7	186,7	73,5	7	179,0	70,5
8	216,9	85,4	8	207,0	81,5
9	223,5	88,0	9	237,5	93,5
10	301,0	118,5	10	271,5	106,9
11	336,6	132,5	11	328,0	129,1

HLL Salmon 18 18' 0" 2 mids 3 tips 1881-1908 Rod No. "A" over varnish			HLL Salmon 16 16' 0" 1881-1908 Rod No. "C" without varnish			HLL Salmon 15 EH 15' 0" EH 1908-1910 / 1925-1964 Rod No. "EH" over varnish			HLL Salmon 15 15' 0" 1878-1881 Rod No. "E" without varnish		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
2	3,60	0,142	1	3,02	0,119	1	3,19	0,126	1	2,70	0,106
5	3,70	0,146	5	3,31	0,130	5	3,92	0,154	5	3,04	0,120
10	4,20	0,165	10	3,91	0,154	10	4,50	0,177	10	3,65	0,144
15	4,76	0,187	15	4,42	0,174	15	5,12	0,202	15	4,12	0,162
20	5,25	0,207	20	5,18	0,204	20	5,77	0,227	20	4,54	0,179
25	5,97	0,235	25	5,85	0,230	25	6,25	0,246	25	4,99	0,196
30	6,42	0,253	30	6,18	0,243	30	6,64	0,261	30	5,44	0,214
35	7,00	0,276	35	6,62	0,260	35	6,93	0,273	35	5,80	0,228
40	7,38	0,291	40	7,04	0,277	40	7,41	0,292	40	6,13	0,241
45	7,90	0,311	45	7,57	0,298	45	7,79	0,306	45	6,47	0,255
50	8,48	0,334	50	7,83	0,308	50	8,15	0,321	50	6,79	0,267
55	9,00	0,354	55	8,23	0,324	55	8,53	0,336	55	7,00	0,276
60	9,44	0,372	60	8,47	0,333	58	8,72	0,343	59	7,23	0,285
65	9,85	0,388	62	8,63	0,340						
70	10,20	0,402				65	9,32	0,367	65	7,76	0,306
75			68	8,95	0,352	70	9,81	0,386	70	8,40	0,331
80	11,30	0,445	70	9,16	0,361	75	10,02	0,394	75	8,80	0,346
85	11,50	0,453	75	9,56	0,376	80	10,56	0,416	80	9,25	0,364
90	11,90	0,469	80	9,89	0,389	85	10,95	0,431	85	9,65	0,380
95	12,40	0,488	85	10,18	0,401	90	11,37	0,448	90	10,03	0,395
100	12,79	0,504	90	10,58	0,417	95	11,82	0,465	95	10,40	0,409
105	13,30	0,524	95	10,98	0,432	100	12,14	0,478	100	10,85	0,427
110	13,75	0,541	100	11,46	0,451	105	12,52	0,493	105	11,18	0,440
115	14,30	0,563	105	11,98	0,472	110	12,97	0,511	110	11,58	0,456
120	14,80	0,583	110	12,43	0,489	115	13,34	0,525	115	11,83	0,466
125	15,00	0,591	115	12,68	0,499	117	13,32	0,524	117	11,90	0,469
130	15,40	0,606	120	12,96	0,510			0,000			
135	16,00	0,630	125	13,33	0,525	126	13,57	0,534	124	12,08	0,476
140						130	14,02	0,552	125	12,16	0,479
145			132	14,20	0,559	135	14,44	0,569	130	12,68	0,499
150	16,50	0,650	135	14,23	0,560	140	14,84	0,584	135	13,13	0,517
155	17,00	0,669	140	14,55	0,573	145	15,29	0,602	140	13,66	0,538
160	17,62	0,694	145	15,00	0,591	150	15,89	0,626	145	14,08	0,554
165	18,16	0,715	150	15,25	0,600	152	16,54	0,651	150	14,58	0,574
170	18,80	0,740	155	15,60	0,614	153	17,32	0,682	152	14,76	0,581
175	19,29	0,759	160	16,17	0,637	154	18,96	0,747	154	14,94	0,588
180	19,90	0,783	165	16,64	0,655	155	20,00	0,788	155	15,40	0,606
185	20,60	0,811	166	16,70	0,657	181	20,00	0,788	156	16,10	0,634
186	20,68	0,814	167	16,87	0,664				157	17,10	0,673
187	20,76	0,817	168	17,55	0,691				180	17,10	0,673
189	21,44	0,844	169	18,43	0,726						
190	22,70	0,894	192	18,44	0,726						
216	22,70	0,894									
Ferrules	26/64	40/64	Ferrules	22/64	34/64	Ferrules	22/64	34/64	Ferrules	19/64	30/64
			Weight	1140 g	40 oz	Weight	931 g	31 oz	Weight	700 g	24,7 oz
Guides, from top			Guides, from top			Guides, from top			Guides, from top		
Nr.	cm	in	Nr.	cm	in	Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0,0	0,0	0	0,0	0,0	0	0,0	0,0
1	15,5	6,1	1	19,8	7,8	1	16,0	6,3	1	21,0	8,3
2	33,5	13,2	2	39,9	15,7	2	35,2	13,9	2	42,7	16,8
3	53,0	20,9	3	62,6	24,6	3	57,2	22,5	3	67,0	26,4
4	75,5	29,7	4	86,8	34,2	4	80,7	31,8	4	96,0	37,8
5	100,0	39,4	5	112,8	44,4	5	116,5	45,9	5	127,5	50,2
6	126,0	49,6	6	140,3	55,2	6	134,3	52,9	6	160,6	63,2
7	156,5	61,6	7	171,6	67,6	7	162,6	64,0	7	196,0	77,2
8	194,5	76,6	8	210,8	83,0	8	191,9	75,6	8	234,0	92,1
9	232,5	91,5	9	251,5	99,0	9	222,7	87,7	9	273,9	107,8
10	278,0	109,4	10	294,1	115,8	10	254,6	100,2	10	314,7	123,9
11	330,5	130,1	11	335,7	132,2	11	286,3	112,7	11	349,5	137,6
12	381,5	150,2	12	377,6	148,7	12	317,0	124,8			
13	420,5	165,6				13	359,0	141,3			

**HLL
Salmon 15
15' 0"** 2 mids 3 tips
1881-1908
Rod No. "E"
without varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,55	0,100
5	3,04	0,120
10	3,68	0,145
15	4,10	0,161
20	4,51	0,178
25	4,92	0,194
30	5,37	0,212
35	5,81	0,229
40	6,21	0,244
45	6,60	0,260
50	6,96	0,274
55	7,19	0,283
58	7,49	0,295
65	7,77	0,306
70	8,32	0,327
75	8,78	0,345
80	9,15	0,360
85	9,59	0,378
90	9,97	0,393
95	10,21	0,402
100	10,45	0,411
105	10,69	0,421
110	11,17	0,440
115	11,62	0,457
117	11,65	0,458
124	12,51	0,493
125	12,53	0,493
130	13,09	0,515
135	13,47	0,530
140	13,86	0,546
145	14,40	0,567
150	14,87	0,585
152	15,08	0,594
154	15,26	0,601
155	15,40	0,606
156	15,57	0,613
157	15,84	0,624
180	15,84	0,630

Ferrules 19/64 30/64
Weight 706 g 24,9 oz

**HLL
Salmon 15
15' 0"**
1881-1908
Rod No. "E"
without varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,50	0,098
5	3,00	0,118
10	3,40	0,134
15	3,74	0,147
20	4,38	0,172
25	4,90	0,193
30	5,33	0,210
35	5,66	0,223
40	6,08	0,239
45	6,55	0,258
50	7,03	0,277
55	7,27	0,286
58	7,40	0,291
64	8,06	0,317
65	8,13	0,320
70	8,42	0,331
75	8,86	0,349
80	9,23	0,363
85	9,66	0,380
90	10,09	0,397
95	10,56	0,416
100	10,86	0,428
105	11,18	0,440
110	11,58	0,456
115	11,94	0,470
117	12,05	0,474
125	12,14	0,478
132	12,72	0,501
135	13,02	0,513
140	13,40	0,528
145	13,88	0,546
150	14,30	0,563
155	15,00	0,591
156	15,57	0,613
157	16,20	0,638
180	16,20	0,638

Ferrules 19/64 30/64
Weight 750 g 26,5 oz

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	16,0	16,0
2	34,5	19,2
3	56,7	22,0
4	80,2	23,5
5	105,5	35,8
6	133,0	17,8
7	160,2	27,2
8	198,5	38,0
9	238,5	40,0
10	281,5	42,0
11	315,5	34,0
12	356,5	41,0

**HLL
Salmon 14
14' 0"**
1925-1964
Rod No. "J"
without varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,14	0,084
5	2,50	0,099
10	3,13	0,123
15	3,83	0,151
20	4,31	0,170
25	4,88	0,192
30	5,32	0,210
35	5,56	0,219
40	6,03	0,237
45	6,52	0,257
50	6,81	0,268
54	7,18	0,283
60	7,27	0,286
65	7,73	0,304
70	8,06	0,317
75	8,38	0,330
80	8,84	0,348
85	9,11	0,359
90	9,71	0,382
95	10,24	0,403
100	10,53	0,414
105	10,67	0,420
109	10,83	0,426
116	11,22	0,442
120	11,62	0,457
125	12,18	0,479
130	12,63	0,497
135	13,22	0,521
140	13,65	0,537
145	14,16	0,557
146	14,45	0,569
147	15,38	0,606
148	17,50	0,606
168	17,50	0,693

Ferrules 18/64 28/64
Weight 626 g 20,2 oz

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	14,3	5,6
2	33,0	13,0
3	53,5	21,1
4	75,7	29,8
5	99,0	39,0
6	124,5	49,0
7	151,1	59,5
8	177,5	69,9
9	204,0	80,3
10	232,8	91,7
11	264,0	103,9
12	295,3	116,3
13	329,4	129,7

Ulf Löfdal

**HLL
Salmon 14
14' 0"**
over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,03	0,080
5	2,39	0,094
10	2,90	0,114
15	3,40	0,134
20	4,06	0,160
25	4,60	0,181
30	5,05	0,199
35	5,54	0,218
40	5,89	0,232
45	6,35	0,250
50	6,50	0,256
55	6,96	0,274
60	7,01	0,276
65	7,34	0,289
70	7,67	0,302
75	7,90	0,311
80	8,28	0,326
85	8,81	0,347
90	9,27	0,365
95	9,75	0,384
100	10,16	0,400
105	10,44	0,411
110	11,05	0,435
115	11,15	0,439
120	11,46	0,451
125	11,91	0,469
130	12,37	0,487
135	12,73	0,501
140	15,06	0,593
143	15,75	0,620
146	15,75	0,620
147	15,75	0,620
168	15,75	0,620

54
Ulf Löfdal

55
Ulf Löfdal

56

57

**HLL
Salmon 13
13' 0"**

over varnish

Length (in)	Diam. (mm)	Diam. (in)
0	2,56	0,101
5	3,23	0,127
10	3,73	0,147
15	4,19	0,165
20	4,62	0,182
25	5,05	0,199
30	5,54	0,218
35	5,78	0,228
40	6,27	0,247
45	6,75	0,266
50	6,91	0,272
55	6,93	0,273
60	7,13	0,281
65	7,50	0,295
70	7,90	0,311
75	8,03	0,316
80	8,20	0,323
85	8,65	0,341
90	8,93	0,352
95	9,19	0,362
100	9,51	0,374
105	9,68	0,381
110	9,78	0,385
115	9,94	0,391
120	10,42	0,410
125	10,89	0,429
130	11,21	0,441
135	12,97	0,511
140	14,09	0,555
145	14,09	0,555
150	14,09	0,555
155	14,09	0,555
156	14,09	0,555

**HLL
Salmon 13
13' 0"**

over varnish

Length (in)	Diam. (mm)	Diam. (in)
0	2,29	0,090
5	2,44	0,096
10	2,79	0,110
15	3,45	0,136
20	3,94	0,155
25	4,34	0,171
30	4,72	0,186
35	5,08	0,200
40	5,56	0,219
45	5,84	0,230
50	6,32	0,249
55	6,48	0,255
60	6,91	0,272
65	7,11	0,280
70	7,54	0,297
75	7,77	0,306
80	8,08	0,318
85	8,38	0,330
90	8,61	0,339
95	8,89	0,350
100	9,14	0,360
105	9,37	0,369
110	9,60	0,378
115	9,98	0,393
120	10,39	0,409
125	10,82	0,426
130	11,40	0,449
135	13,92	0,548
140	14,22	0,560
145	14,22	0,560
150	14,22	0,560
155	14,22	0,560
156	14,22	0,560

**HLL
Salmon 12
12' 0"**
1908-1910 / 1925-1964
Rod No. "M"
over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,02	0,079
5	2,38	0,094
10	2,78	0,110
15	3,43	0,135
20	3,96	0,156
25	4,42	0,174
30	4,73	0,186
35	5,02	0,197
40	5,37	0,211
45	5,93	0,233
46	6,04	0,238
52	6,36	0,250
55	6,67	0,262
60	7,14	0,281
65	7,43	0,292
70	7,74	0,305
75	8,11	0,319
80	8,35	0,329
85	8,61	0,339
90	8,91	0,351
93	9,18	0,361
100	9,25	0,364
105	9,71	0,382
110	10,09	0,397
115	10,65	0,419
120	11,02	0,434
125	11,84	0,466
130	14,54	0,572
135	15,00	0,591
144	15,00	0,591

**HLL
10' 6" Hunt**
incl. 6" extension butt = 11"
1910-1925 / 1964
Rod No. "69 H" HUNT
without varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,37	0,093
5	2,90	0,114
10	3,46	0,136
15	3,88	0,153
20	4,40	0,173
25	4,77	0,188
30	5,06	0,199
35	5,44	0,214
40	5,71	0,225
45	5,71	0,225
50	6,18	0,243
55	6,62	0,261
60	7,14	0,281
65	7,46	0,294
70	8,00	0,315
75	8,28	0,326
80	8,51	0,335
82	8,63	0,340
88	9,25	0,364
90	9,45	0,372
95	9,94	0,391
100	10,24	0,403
105	10,71	0,422
110	11,12	0,438
114	11,50	0,453
126	11,50	0,453
132	11,50	0,453

Ferrules 15/64 23/64
Weight 418 g 14,7 oz

Ferrules 14/64 21/64
Weight 301 g 10,6 oz

Guides, from top

Guides, from top

Nr.	cm	in	Nr.	cm	in
0	0,0	0	0	0,0	0
1	15,7	6,2	1	13,2	5,2
2	31,7	12,5	2	26,8	10,6
3	48,5	19,1	3	41,5	16,3
4	67,0	26,4	4	56,8	22,4
5	86,7	34,1	5	73,1	28,8
6	107,0	42,1	6	90,6	35,7
7	129,1	50,8	7	113,5	44,7
8	151,1	59,5	8	132,5	52,2
9	174,0	68,5	9	152,5	60,0
10	197,2	77,6	10	173,5	68,3
11	220,7	86,9	11	195,0	76,8
12	252,8	99,5	12	222,0	87,4
13	286,2	112,7	13	250,0	98,4

over varnish		
Length (in)	Diam. (mm)	Diam. (in)
1	4,30	0,169
5	4,60	0,181
10	5,07	0,200
15	5,75	0,226
20	6,10	0,240
25	6,40	0,252
30	7,25	0,285
35	7,80	0,307
40	8,30	0,327
45	8,80	0,346
50	9,00	0,354
54	9,60	0,378
65	10,65	0,419
70	10,75	0,423
75	10,75	0,423
80	11,10	0,437
85	12,05	0,474
90	12,75	0,502
95	12,75	0,502
100	12,75	0,502
105	12,75	0,502
110	13,05	0,514
120	14,20	0,559
125	14,65	0,577
130	15,30	0,602
135	15,70	0,618
140	16,20	0,638
145	16,60	0,654
168	16,60	0,654
Guides, from top		
Nr.	cm	in
0	0,0	0,0
1	21,0	8,3
2	49,0	19,3
3	86,0	33,9
4	126,0	49,6
5	168,0	66,1
6	213,0	83,9
7	262,0	103,1
8	316,0	124,4
Ferrules	10,0 mm 14,0 mm	25,2/64 35,3/64
Weight	650 g	22,9 oz
Handle	60 cm	

over varnish		
Length (in)	Diam. (mm)	Diam. (in)
1	3,39	0,133
5	3,76	0,148
10	4,31	0,170
15	4,77	0,188
20	5,33	0,210
25	5,97	0,235
30	6,39	0,252
35	7,08	0,279
40	7,76	0,306
45	8,16	0,321
50	8,50	0,335
54	9,01	0,355
60	9,44	0,372
65	9,82	0,387
70	10,13	0,399
75	10,51	0,414
80	11,14	0,439
85	11,54	0,454
90	11,99	0,472
95	12,23	0,481
100	12,89	0,508
105	13,09	0,515
110	13,01	0,512
117	13,97	0,550
120	14,02	0,552
125	14,44	0,569
130	15,05	0,593
135	15,58	0,613
140	15,63	0,615
143	15,83	0,623
168	16,00	0,630
Guides, from top		
Nr.	cm	in
0	0,0	0,0
1	13,0	5,1
2	30,2	11,9
3	51,0	20,1
4	75,1	29,6
5	101,0	39,8
6	129,5	51,0
7	159,7	62,9
8	192,0	75,6
9	224,5	88,4
10	260,5	102,6
11	300,0	118,1
12	337,5	132,9
Ferrules	9,0 mm 14,0 mm	22,7/64 35,3/64
Weight	645 g	22,8 oz
Handle	65 cm	

over varnish		
Length (in)	Diam. (mm)	Diam. (in)
2	3,53	0,139
5	3,77	0,149
10	4,43	0,175
15	5,30	0,209
20	5,80	0,228
25	6,61	0,260
30	7,18	0,283
35	7,67	0,302
40	7,94	0,313
45	8,23	0,324
50	8,76	0,345
55	8,89	0,350
60	8,94	0,352
65	9,13	0,359
69	9,42	0,371
76	10,48	0,412
80	10,71	0,422
85	10,90	0,429
90	11,27	0,444
95	11,84	0,466
100	12,15	0,478
105	12,75	0,502
110	13,24	0,521
115	13,88	0,546
120	14,93	0,588
125	15,00	0,591
144	15,00	0,591
Guides, from top		
Nr.	cm	in
0	0,0	0,0
1	12,6	5,0
2	29,2	11,5
3	47,9	18,9
4	68,2	26,9
5	90,5	35,6
6	114,5	45,1
7	139,4	54,9
8	167,0	65,7
9	200,2	78,8
10	235,0	92,5
11	272,2	107,2
Ferrule	10,0 mm	
Handle	60 cm	

over varnish		
Length (in)	Diam. (mm)	Diam. (in)
2	4,10	0,161
5	4,58	0,180
10	5,08	0,200
15	5,29	0,208
20	5,70	0,224
25	6,20	0,244
30	6,90	0,272
35	7,68	0,302
40	8,20	0,323
45	8,60	0,339
50	8,75	0,344
55	8,90	0,350
60	9,60	0,378
65	9,77	0,385
70	10,10	0,398
75	10,80	0,425
80	11,40	0,449
85	11,63	0,458
90	11,73	0,462
95	11,96	0,471
100	12,00	0,472
105	12,15	0,478
110	12,70	0,500
115	13,80	0,543
120	13,64	0,537
125	13,62	0,536
130	13,81	0,544
135	14,61	0,575
140	15,12	0,595
145	15,40	0,606
168	15,80	0,622
Guides, from top		
Nr.	cm	in
0	14,0	5,5
1	32,0	12,6
2	54,0	21,3
3	84,0	33,1
4	116,5	45,9
5	152,0	59,8
6	187,0	73,6
7	224,0	88,2
8	262,0	103,1
9	297,5	117,1
10	235,0	92,5

Pezon & Michel
"Glory"
14' 6" # 10
(1953-1967)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	2,85	0,112
5	3,60	0,142
10	4,00	0,157
15	4,35	0,171
20	5,00	0,197
25	5,53	0,218
30	6,00	0,236
35	6,70	0,264
40	7,20	0,283
45	7,40	0,291
50	8,15	0,321
55	8,45	0,333
60	9,10	0,358
65	9,73	0,383
70	10,06	0,396
75	10,13	0,399
80	10,34	0,407
85	10,74	0,423
90	11,01	0,433
95	11,48	0,452
100	11,61	0,457
105	11,78	0,464
110	12,32	0,485
115	12,58	0,495
120	13,16	0,518
125	13,83	0,544
130	14,42	0,568
135	14,60	0,575
140	14,78	0,582
145	14,99	0,590
150	15,38	0,606
174	16,00	0,630

Pezon & Michel
"Parabolic Saumon"
13' 0" # 10
(1953-1972)

without varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,70	0,146
5	3,88	0,153
10	4,38	0,172
15	4,75	0,187
20	5,26	0,207
25	5,68	0,224
30	6,14	0,242
35	6,50	0,256
40	6,82	0,269
45	7,25	0,285
50	7,65	0,301
55	8,30	0,327
60	8,65	0,341
65	9,00	0,354
70	9,40	0,370
75	9,70	0,382
80	10,00	0,394
85	10,30	0,406
90	10,50	0,413
95	10,80	0,425
100	11,16	0,439
105	11,55	0,455
110	11,90	0,469
115	12,00	0,472
120	12,10	0,476
125	12,35	0,486
130	12,65	0,498
156	13,10	0,516

Pezon & Michel
"Parabolic Saumon"
12' 0" # 9
(1953-1982/1993)

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,55	0,140
5	3,75	0,148
10	4,13	0,163
15	4,55	0,179
20	5,00	0,197
25	5,32	0,209
30	5,72	0,225
35	6,06	0,239
40	6,40	0,252
45	6,55	0,258
51	7,50	0,295
55	7,83	0,308
60	8,15	0,321
65	8,30	0,327
70	8,65	0,341
75	8,97	0,353
80	9,35	0,368
85	9,78	0,385
90	10,10	0,398
95	10,30	0,406
105	11,20	0,441
110	11,30	0,445
115	11,30	0,445
120	11,55	0,455
144	12,10	0,476

Alex Martin
of Aberdeen
"Eskdale"
14' 0"

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,88	0,153
5	4,10	0,161
10	4,55	0,179
15	5,10	0,201
20	5,56	0,219
25	6,00	0,236
30	6,43	0,253
35	6,93	0,273
40	7,42	0,292
45	7,86	0,309
50	8,35	0,329
53,2	8,65	0,341
60	9,20	0,362
65	9,55	0,376
70	9,81	0,386
75	10,35	0,407
80	10,42	0,410
85	10,70	0,421
90	11,00	0,433
95	11,20	0,441
100	11,50	0,453
105	11,65	0,459
109,5	11,95	0,470
115,5	12,25	0,482
120	12,67	0,499
125	12,98	0,511
130	13,52	0,532
135	13,90	0,547
140	14,35	0,565
144	14,48	0,570
168	15,18	0,693

Weight 646 g 22,7 oz

Guides, from top

Guides, from top

Nr.	cm	in	Nr.	cm	in
0	0,0	0,0	0	0,0	0,0
1	21,5	8,5	1	15,0	5,9
2	42,0	16,5	2	34,0	13,4
3	63,5	25,0	3	57,5	22,6
4	86,0	33,9	4	86,0	33,9
5	109,5	43,1	5	119,0	46,9
6	145,0	57,1	6	135,0	53,1
7	181,0	71,3	7	187,5	73,8
8	220,0	86,6	8	224,0	88,2
9	268,0	105,5	9	262,0	103,1
			10	299,0	117,7
			11	338,0	133,1

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Payne
11' 6"
model 223

Length (in)	Diam. (mm)	Diam. (in)
0	2,28	0,090
5	2,58	0,102
10	2,98	0,117
15	3,56	0,140
20	4,08	0,161
25	4,50	0,177
30	4,88	0,192
35	5,20	0,205
40	5,52	0,217
45	5,80	0,228
46,5	5,99	0,236
50	6,25	0,246
55	6,66	0,262
60	7,08	0,279
65	7,54	0,297
70	7,80	0,307
75	8,16	0,321
80	8,50	0,335
85	8,84	0,348
90	9,14	0,360
94	9,42	0,371
98,5	9,77	0,385
100	9,82	0,387
105	10,22	0,402
110	10,64	0,419
115	10,75	0,423
120	12,12	0,477
138	12,12	0,477

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Ulf Löfdal

Payne
11' 0" # 7/8

with 5" extension butt

Length (in)	Diam. (mm)	Diam. (in)
0	1,68	0,066
5	2,31	0,091
10	2,79	0,110
15	3,28	0,129
20	3,66	0,144
25	4,01	0,158
30	4,29	0,169
35	4,50	0,177
40	4,62	0,182
45	5,26	0,207
50	5,79	0,228
55	6,32	0,249
60	6,76	0,266
65	7,06	0,278
70	7,34	0,289
75	7,44	0,293
80	7,80	0,307
85	8,08	0,318
90	8,18	0,322
95	8,23	0,324
100	8,53	0,336
105	8,99	0,354
110	9,27	0,365
115	9,73	0,383
120	11,05	0,435
132	11,05	0,435
137	11,05	0,435

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Jerry Drake

Payne
10' 6"
model 218

with 6" extension butt

over varnish

Length (in)	Diam. (mm)	Diam. (in)
1	1,78	0,070
5	2,26	0,089
10	2,84	0,112
15	3,38	0,133
20	3,78	0,149
25	4,14	0,163
30	4,57	0,180
35	5,03	0,198
40	5,36	0,211
41	5,46	0,215
45	5,94	0,234
50	6,10	0,240
55	6,65	0,262
60	7,06	0,278
65	7,42	0,292
70	7,82	0,308
75	8,23	0,324
80	8,36	0,329
85	8,74	0,344
88	9,22	0,363
93	9,60	0,378
98	9,80	0,386
103	10,29	0,405
108	10,72	0,422
111	10,87	0,428
113	11,07	0,436
114	12,01	0,473
126	12,01	0,473
132	12,01	0,473

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Ulf Löfdal

FE Thomas
13' 0" # 9

Length (in)	Diam. (mm)	Diam. (in)
0	1,80	0,071
5	2,01	0,079
10	2,79	0,110
15	3,58	0,141
20	4,14	0,163
25	4,57	0,180
30	5,13	0,202
35	5,51	0,217
40	5,71	0,225
45	6,02	0,237
50	6,20	0,244
55	6,73	0,265
60	6,78	0,267
65	7,11	0,280
70	7,39	0,291
75	7,95	0,313
80	8,46	0,333
85	8,61	0,339
90	8,71	0,343
95	9,22	0,363
100	9,86	0,388
105	10,67	0,420
110	11,15	0,439
115	11,48	0,452
120	11,71	0,461
125	12,22	0,481
130	12,70	0,500
132	12,70	0,500
156	12,70	0,500

Ferrules 13/64 20/64

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	13,0	5,1
2	27,9	11,0
3	43,3	17,1
4	59,1	23,3
5	75,2	29,6
6	92,7	36,5
7	119,1	46,9
8	136,2	53,6
9	152,7	60,1
10	173,0	68,1
11	196,9	77,5
12	234,6	92,4
13	261,6	103,0

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Ulf Löfdal

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Ulf Löfdal

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Hoagy Carmichael

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Hoagy Carmichael

FE Thomas
13' 6" # 10

Orvis
10' 6" # 9
Nr.13959 (29.01.1953)
with. 6" extension butt = 11'

Garrison
10' 0"
model 236
with 5" extension butt
18/64 ferrule
without varnish

Garrison
10' 0"
model 240
with 5" extension butt
18/64 ferrule
without varnish

Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
0	2,59	0,102	0	2,40	0,094	0	2,18	0,086	0	2,18	0,086
5	3,00	0,118	5	2,68	0,106	5	2,54	0,100	5	2,59	0,102
10	3,51	0,138	10	3,13	0,123	10	3,15	0,124	10	3,20	0,126
15	3,81	0,150	15	3,42	0,135	15	3,63	0,143	15	3,71	0,146
20	5,11	0,201	20	3,87	0,152	20	4,01	0,158	20	4,09	0,161
25	5,59	0,220	25	4,21	0,166	25	4,37	0,172	25	4,45	0,175
30	6,02	0,237	30	4,50	0,177	30	4,72	0,186	30	4,83	0,190
35	6,02	0,237	35	4,98	0,196	35	5,05	0,199	35	5,16	0,203
40	6,48	0,255	40	5,44	0,214	40	5,36	0,211	40	5,46	0,215
45	6,91	0,272				45	5,72	0,225	45	5,82	0,229
50	7,09	0,279	45	5,94	0,234	50	6,05	0,238	50	6,15	0,242
			50	6,48	0,255	55	6,40	0,252	55	6,50	0,256
55	7,59	0,299	55	6,94	0,273	60	6,76	0,266	60	6,86	0,270
60	8,41	0,331	60	7,20	0,283	65	7,09	0,279	65	7,19	0,283
65	8,59	0,338	65	7,62	0,300	70	7,42	0,292	70	7,52	0,296
70	8,97	0,353	70	7,79	0,307	75	7,77	0,306	75	7,87	0,310
75	9,52	0,375	75	8,12	0,320	80	8,13	0,320	80	8,23	0,324
80	9,73	0,383	80	8,40	0,331	85	8,48	0,334	85	8,59	0,338
85	9,80	0,386	85	8,69	0,342	90	8,84	0,348	90	8,94	0,352
90	10,19	0,401				95	9,19	0,362	95	9,30	0,366
95	10,29	0,405	90	9,07	0,357	100	9,55	0,376	100	9,65	0,380
100	10,90	0,429	95	9,76	0,384	105	10,06	0,396	105	10,16	0,400
105	11,02	0,434	100	10,11	0,398	110	10,82	0,426	110	10,92	0,430
			105	10,37	0,408	115	10,82	0,426	115	10,92	0,430
110	11,46	0,451	110	10,70	0,421	120	10,82	0,426	120	10,92	0,430
115	11,71	0,461	115	10,85	0,427						
120	12,47	0,491	120	11,00	0,433						
125	12,57	0,495	126	11,15	0,439						
162	12,57	0,495	132	11,18	0,440						

5" extension butt

5" extension butt

Ferrules 14/64 21/64

**Conroy, Bisset
& Malleison
18' 0"**

appr. 1875-1881

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	4,18	0,165
5	4,60	0,181
10	5,13	0,202
15	5,58	0,220
20	5,93	0,233
25	6,41	0,252
30	6,43	0,253
35	6,71	0,264
40	7,12	0,280
45	7,54	0,297
50	7,77	0,306
55	8,16	0,321
60	8,95	0,352
65	9,46	0,372
70	9,94	0,391
80	10,48	0,413
85	10,76	0,424
90	11,17	0,440
95	11,79	0,464
100	12,32	0,485
105	12,90	0,508
110	13,45	0,530
115	14,00	0,551
120	14,62	0,576
125	15,10	0,594
130	15,66	0,617
135	16,34	0,643
140	17,24	0,679
150	18,04	0,710
155	18,53	0,730
160	19,32	0,761
165	19,94	0,785
170	20,44	0,805
175	21,12	0,831
180	21,94	0,864
183	23,05	0,907
184	24,64	0,970
185	27,55	1,085
186	29,50	1,161
187	30,25	1,191
216	30,25	1,191

Rattan handle, mortised
Ring-and-keeper guidesFerrules: 42/64 25/64
(spiggot)**unknown,
butt cap missing
18' 0"**

appr. 1870-80

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	4,87	0,192
5	4,89	0,193
10	5,43	0,214
15	5,76	0,227
20	6,02	0,237
25	6,51	0,256
30	6,74	0,265
35	6,89	0,271
40	7,26	0,286
45	7,74	0,305
50	8,28	0,326
55	8,57	0,337
60	8,82	0,347
65	8,97	0,353
70	9,07	0,357
80	9,20	0,362
85	9,75	0,384
90	10,45	0,411
95	11,16	0,439
100	12,32	0,485
105	13,08	0,515
110	13,16	0,518
115	13,47	0,530
120	13,97	0,550
125	14,23	0,560
130	14,94	0,588
135	15,64	0,616
140	16,43	0,647
150	16,61	0,654
155	16,51	0,650
160	16,86	0,664
165	17,25	0,679
170	17,62	0,694
175	17,34	0,683
180	17,80	0,701
185	19,56	0,770
186	20,55	0,809
187	21,49	0,846
188	22,31	0,878
189	24,63	0,970
190	26,37	1,038
191	28,94	1,139
216	28,94	1,139

Rattan handle, mortised
Ring-and-keeper guidesFerrules: 41/64 23/64
(spiggot)**Milwards
"Fly Versa"
12' 10"**

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,32	0,131
5	3,58	0,141
10	4,07	0,160
15	4,48	0,176
20	4,91	0,193
25	5,25	0,207
30	5,62	0,221
35	6,10	0,240
40	6,43	0,253
45	6,77	0,267
50	7,15	0,281
55	7,59	0,299
61	8,93	0,352
63	8,95	0,352
68	9,32	0,367
73	9,73	0,383
78	10,05	0,396
83	10,36	0,408
88	10,65	0,419
93	11,00	0,433
98	11,27	0,444
103	11,95	0,470
108,5	13,29	0,523
111	13,32	0,524
116	13,53	0,533
121	13,42	0,528
123,5	13,21	0,520
125	12,40	0,488
154	9,26	0,365

**Farlow & Co.
"Denham"
15' 0"**

Nr. 13262

over varnish

Length (in)	Diam. (mm)	Diam. (in)
2	3,35	0,132
5	3,78	0,149
10	4,28	0,169
15	4,70	0,185
20	5,18	0,204
25	5,58	0,220
30	6,18	0,243
35	6,66	0,262
40	7,04	0,277
45	7,63	0,300
50	8,08	0,318
56	8,75	0,344
60	13,00	0,512
65	10,11	0,398
69	10,11	0,398
74	10,25	0,404
79	10,58	0,417
84	10,75	0,423
89	10,80	0,425
94	11,01	0,433
99	11,10	0,437
104	11,30	0,445
109	12,00	0,472
115	24,00	0,945
121	13,59	0,535
123	13,59	0,535
128	13,60	0,535
133	13,60	0,535
138	13,85	0,545
143	14,45	0,569
148	15,30	0,602
180	16,80	0,661

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	15,0	5,9
2	33,5	13,2
3	54,0	21,3
4	77,0	30,3
5	103,0	40,6
6	133,0	52,4
7	168,5	66,3
8	199,0	78,3
9	232,0	91,3
10	267,0	105,1
11	313,0	123,2
12	353,0	139,0

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Bill Harms

Vincent Marinaro
"Salar" 1977
14' 6" # 8/9

without varnish

Length (in)	Diam. Tip 1 (mm)	Diam. Tip 1 (in)	Diam. Tip 2 (mm)	Diam. Tip 2 (in)
0	2,54	0,100	3,05	0,120
5	3,15	0,124	3,61	0,142
10	3,66	0,144	4,06	0,160
15	4,27	0,168	4,42	0,174
20	4,67	0,184	4,78	0,188
25	5,18	0,204	5,13	0,202
30	5,69	0,224	5,54	0,218
35	6,10	0,240	5,89	0,232
40	6,60	0,260	6,35	0,250
45	7,01	0,276	6,76	0,266
50	7,26	0,286	7,11	0,280
55	7,42	0,292	7,26	0,286
58	7,47	0,294	7,32	0,288
63	8,13	0,320		
68	8,59	0,338		
73	8,99	0,354		
78	9,25	0,364		
83	9,60	0,378		
88	9,80	0,386		
93	10,06	0,396		
98	10,26	0,404		
103	10,46	0,412		
108	10,67	0,420		
113	10,77	0,424		
116	10,82	0,426		
121	11,68	0,460		
126	12,09	0,476		
131	12,45	0,490		
136	12,70	0,500		
141	13,06	0,514		
146	13,26	0,522		
151	13,41	0,528		
174	13,61	0,536		

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	16,5	6,5
2	34,9	13,8
3	55,2	21,8
4	78,1	30,8
5	101,6	40,0
6	129,2	50,9
7	144,5	56,9
8	173,0	68,1
9	200,3	78,9
10	228,3	89,9
11	256,2	100,9
12	270,2	106,4
13	300,7	118,4

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George Leonard Herter:
Professional Split Bamboo
Rod Building Manual and
Manufacturer's Guide (1949)

**"Double Grip
Salmon Dry Fly Rod"**

11'0"

Length (in)	Diam. (mm)	Diam. (in)
0,0	3,56	0,140
7,0	4,06	0,160
13,0	4,62	0,182
19,0	5,18	0,204
25,0	5,74	0,226
31,0	6,25	0,246
37,0	6,55	0,258
44,0	6,76	0,266
50,5	7,32	0,288
56,5	7,82	0,308
62,5	8,33	0,328
68,5	8,84	0,348
74,5	9,14	0,360
80,5	9,40	0,370
87,5	9,55	0,376
88,5	9,55	0,376
95,0	10,16	0,400
101,0	10,77	0,424
107,0	11,28	0,444
113,0	11,68	0,460
119,0	11,68	0,460
125,0	11,68	0,460
132,0	11,68	0,460

Ferrules: 24/64 17/64

80

Richard Walker:
Rod Building for Amateurs
(1952)

**"3-piece medium
action sea-trout or
grilse rod"**

11'0"

Length (in)	Diam. (mm)	Diam. (in)
0	2,29	0,090
6	2,64	0,104
12	3,20	0,126
18	3,76	0,148
24	4,32	0,170
30	4,67	0,184
36	5,08	0,200
42	5,59	0,220
48	5,94	0,234
54	6,30	0,248
60	6,45	0,254
66	6,81	0,268
72	7,21	0,284
78	7,62	0,300
84	7,98	0,314
90	8,48	0,334
96	8,89	0,350
102	9,35	0,368
108	9,86	0,388
114	10,01	0,394
120	10,31	0,406
126	10,52	0,414
132,0	10,67	0,420

Jerry Drake 13' 0" # 9			Jürgen Fischer 11' 6" # 8			Magne Pettersen 11' 0" # 8/9			Bob Milward 12' 0" # 8/9		
Spey Rod			Spey Rod			"Jølstra"					
Ferrules: 19/64		29/64	Ferrules: 16/64		24/64	Ferrules: 17/64		25/64			
(at 52")		(at 104")	weight		320 g	females Titanium					
					11,3 oz	males Ni-silver					
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
0	2,41	0,095	0	2,86	0,095	0	2,28	0,090	0	2,46	0,097
5	3,02	0,119	5	2,93	0,119	5	2,79	0,110	5	2,90	0,114
10	3,61	0,142	10	3,30	0,142	10	3,43	0,135	10	3,43	0,135
15	4,17	0,164	15	3,64	0,164	15	4,06	0,160	15	4,09	0,161
20	4,65	0,183	20	4,09	0,183	20	4,57	0,180	20	4,57	0,180
25	5,13	0,202	25	4,51	0,202	25	4,95	0,195	25	5,03	0,198
30	5,56	0,219	30	4,94	0,219	30	5,33	0,210	30	5,49	0,216
35	5,97	0,235	35	5,40	0,235	35	5,84	0,230	35	5,92	0,233
40	6,38	0,251	40	5,85	0,251	40	6,15	0,242	40	6,35	0,250
45	6,73	0,265	45	6,30	0,265				45	6,71	0,264
50	7,09	0,279				45	6,65	0,262			
			50	6,73	0,279	50	7,14	0,281	50	7,09	0,279
55	7,47	0,294	55	7,34	0,294	55	7,59	0,299	55	7,37	0,290
60	7,85	0,309	60	7,78	0,309	60	7,85	0,309	60	7,70	0,303
65	8,23	0,324	65	8,13	0,324	65	8,31	0,327	65	8,05	0,317
70	8,61	0,339	70	8,44	0,339	70	8,61	0,339	70	8,38	0,330
75	8,97	0,353	75	8,71	0,353	75	8,84	0,348	75	8,71	0,343
80	9,35	0,368	80	8,97	0,368	80	9,30	0,366	80	8,97	0,353
85	9,75	0,384	85	9,20	0,384	85	9,70	0,382	85	9,09	0,358
90	10,16	0,400	90	9,43	0,400				90	9,32	0,367
95	10,59	0,417				90	10,12	0,398	95	9,55	0,376
100	10,97	0,432	95	9,68	0,417	95	10,44	0,411			
			100	10,00	0,432	100	10,96	0,431	100	10,03	0,395
105	11,38	0,448	105	10,28	0,448	105	11,48	0,452	105	10,67	0,420
110	11,89	0,468	110	10,56	0,468	110	11,76	0,463	110	10,95	0,431
115	12,37	0,487	115	10,83	0,487	115	12,50	0,492	115	11,43	0,450
120	12,95	0,510	120	11,19	0,510	120	12,50	0,492	120	11,79	0,464
125	13,69	0,539	125	11,19	0,539	125	12,50	0,492	125	12,12	0,477
130	15,16	0,597	130	11,19	0,539	130	12,50	0,492	130	12,40	0,488
135	15,77	0,621	135	11,19	0,539	132	12,50	0,492	135	12,75	0,502
140	15,77	0,621	138	11,19	0,539				140	13,11	0,516
145	15,80	0,622							144	13,46	0,530
150	15,80	0,622									
156	15,80	0,622									
13' Spey 560 -620 grain weight (9-weight), hollow built, wall.thickness increasing from 0,025" (0,64 mm) at tip to 0,1" (2,54 mm) at butt			Light Spey rod based on Paul Young Para 14 stress curve, hollow built in butt, mid, part of tip						450 gr Skagit head		
53 scallops from 1,9" to 11,5" length dams 0,125"			Ni-Si-ferrules								
Modified from a splice-joint design to use ferrules			Scandi 30-32 g (460-490 grain)								
			Skagit 32-36 g (490-560 grain)								

Rolf Baginski
10' 0" # 8

3-pc.

Length (in)	Diam. (mm)	Diam. (in)
0	2,48	0,098
5	2,82	0,111
10	3,28	0,129
15	3,70	0,146
20	4,14	0,163
25	4,50	0,177
30	4,82	0,190
35	5,03	0,198
40	5,40	0,213
45	6,02	0,237
50	6,58	0,259
55	6,98	0,275
60	7,22	0,284
65	7,42	0,292
70	7,76	0,306
75	8,10	0,319
80	8,60	0,339
85	9,04	0,356
90	9,44	0,372
95	10,02	0,394
100	11,40	0,449
105	11,40	0,449
110	11,40	0,449
115	11,40	0,449
120	11,40	0,449

Rolf Baginski
12' 0" # /910

3-pc.

Length (in)	Diam. (mm)	Diam. (in)
0	2,58	0,102
5	2,96	0,117
10	3,30	0,130
15	3,68	0,145
20	4,12	0,162
25	4,62	0,182
30	5,16	0,203
35	5,50	0,217
40	6,22	0,245
45	6,74	0,265
50	7,22	0,284
55	7,68	0,302
60	8,16	0,321
65	8,62	0,339
70	9,06	0,357
75	9,46	0,372
80	9,82	0,387
85	10,26	0,404
90	10,62	0,418
95	10,92	0,430
100	11,28	0,444
105	11,58	0,456
110	11,90	0,469
115	12,20	0,480
120	12,46	0,491
125	12,70	0,500
130	12,96	0,510
135	13,22	0,520
140	13,46	0,530
144	13,72	0,540

Rolf Baginski
13' 0" # 10/11

3-pc.

Length (in)	Diam. (mm)	Diam. (in)
0	2,50	0,098
5	3,16	0,124
10	3,50	0,138
15	4,08	0,161
20	4,60	0,181
25	5,02	0,198
30	5,40	0,213
35	5,90	0,232
40	6,60	0,260
45	7,14	0,281
50	7,60	0,299
55	7,68	0,302
60	7,90	0,311
65	8,42	0,331
70	8,86	0,349
75	9,26	0,365
80	9,62	0,379
85	10,06	0,396
90	10,42	0,410
95	10,72	0,422
100	11,08	0,436
105	11,38	0,448
110	11,70	0,461
115	12,00	0,472
120	12,26	0,483
125	12,50	0,492
130	12,76	0,502
135	13,02	0,513
140	13,26	0,522
145	13,52	0,532
150	13,52	0,532
156	13,52	0,532

Udo Hildebrandt
11'10" # 8

Ferrules: 6 mm 10 mm

3-pc.

Length (in)	Diam. (mm)	Diam. (in)
0	2,40	0,094
5	2,80	0,110
10	3,50	0,138
15	4,00	0,157
20	4,36	0,172
25	4,70	0,185
30	5,00	0,197
35	5,30	0,209
40	5,60	0,220
45	5,90	0,232
50	6,25	0,246
55	6,65	0,262
60	6,95	0,274
65	7,25	0,285
70	7,55	0,297
75	7,85	0,309
80	8,15	0,321
85	8,45	0,333
90	8,75	0,344
95	10,05	0,396
100	10,35	0,407
105	10,70	0,421
110	11,00	0,433
115	11,30	0,445
120	11,50	0,453
125	11,70	0,461
130	12,00	0,472

Leen Huismann 12' 0" # 9/10			Alberto Poratelli 12' 0" 520 grains Bamboo Ferrules			Wolfram Schott 13' 0" # 10		
3-pc.						Ferrules: 8,0 mm 20,2/64 12.0 mm 30,2/64		
Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)	Length (in)	Diam. (mm)	Diam. (in)
0	2,38	0,094	0	2,80	0,110	1	2,83	0,111
5	2,76	0,109	5	3,20	0,126	5	3,18	0,125
10	3,10	0,122	10	3,60	0,142	10	3,75	0,148
15	3,48	0,137	15	3,90	0,154	15	4,24	0,167
20	3,92	0,154	20	4,20	0,165	20	4,67	0,184
25	4,42	0,174	25	4,60	0,181	25	5,12	0,201
30	4,96	0,195	30	4,90	0,193	30	5,54	0,218
35	5,30	0,209	35	5,20	0,205	35	5,98	0,235
40	6,02	0,237	40	5,60	0,220	40	6,39	0,251
45	6,54	0,257	45	6,24	0,246	45	6,81	0,268
50	7,02	0,276	48	6,24	0,246	50	7,17	0,282
55	7,44	0,293	49	6,24	0,246			
60	7,96	0,313	50	6,24	0,246	55	7,64	0,301
65	8,42	0,331				60	8,02	0,316
70	8,86	0,349	48	8,64	0,340	65	8,41	0,331
75	9,26	0,365	49	8,64	0,340	70	8,75	0,344
80	9,62	0,379	50	8,64	0,340	75	9,09	0,358
85	10,06	0,396	55	7,97	0,314	80	9,45	0,372
90	10,42	0,410	60	7,30	0,287	85	9,74	0,383
95	10,72	0,422	65	7,90	0,311	90	10,14	0,399
100	11,08	0,436	70	8,20	0,323	95	10,49	0,413
105	11,38	0,448	75	8,60	0,339	100	10,86	0,428
110	11,70	0,461	80	8,90	0,350			
115	12,00	0,472	85	9,20	0,362	105	11,40	0,449
120	12,26	0,483	90	9,64	0,380	110	12,00	0,472
125	12,50	0,492	94	9,64	0,380	115	12,55	0,494
130	12,76	0,502	95	9,64	0,380	120	12,95	0,510
135	13,02	0,513	96	9,64	0,380	125	13,35	0,526
140	13,26	0,522	97	9,64	0,380	130	13,68	0,539
144	13,52	0,532	98	9,64	0,380	135	13,80	0,543
						140	13,95	0,549
			94	12,24	0,482	145	14,00	0,551
			95	12,24	0,482	150	14,00	0,551
			96	12,24	0,482	155	14,00	0,551
			97	12,24	0,482	156	14,00	0,551
			98	12,24	0,482			
			100	11,48	0,452			
			103	10,34	0,407			
			105	10,80	0,425			
			108	11,06	0,435			
			110	11,20	0,441			
			113	11,40	0,449	Nr.	cm	in
			115	11,60	0,457	0	0,0	0,0
			118	11,82	0,465	1	16,5	6,5
			120	12,00	0,472	2	34,4	13,5
			123	12,00	0,472	3	53,6	21,1
			125	12,00	0,472	4	74,1	29,2
			128	12,00	0,472	5	96,0	37,8
			130	12,00	0,472	6	119,3	47,0
			133	12,00	0,472	7	143,9	56,6
			135	12,00	0,472	8	169,8	66,8
			138	12,00	0,472	9	197,1	77,6
			140	12,00	0,472	10	225,7	88,9
			143	12,00	0,472	11	255,7	100,7
			144	12,00	0,472	12	289,6	114,0

92
Greenheart Rod

93
Greenheart Rod

94
Greenheart Rod

95
Greenheart Rod

Playfair Grant Vibration
15' 0" # 10/11
No. 3616 (17.09.1936)
spliced 723 g
"medium action"
over varnish 25,5 oz

Length (in)	Diam. (mm)	Diam. (in)
2	3,44	0,135
5	4,11	0,162
10	4,82	0,190
15	5,56	0,219
20	6,20	0,244
25	6,78	0,267
30	7,30	0,287
35	7,78	0,306
40	8,12	0,319
45	8,48	0,334
50	8,88	0,350
54	9,24	0,364
55	12,42	0,489
56	13,61	0,536
57	14,19	0,559
58	14,61	0,575
59	14,62	0,576
60	14,28	0,562
61	13,92	0,548
62	13,60	0,535
63	9,70	0,382
65	9,92	0,391
70	10,52	0,414
75	10,70	0,421
80	11,12	0,438
85	11,38	0,448
90	11,84	0,466
95	12,25	0,482
100	12,54	0,494
105	12,80	0,504
110	12,98	0,511
111	16,50	0,650
112	17,74	0,698
113	18,49	0,728
114	19,27	0,759
115	19,75	0,778
116	20,21	0,796
117	20,40	0,803
118	20,27	0,798
119	19,94	0,785
120	19,43	0,765
121	18,76	0,739
122	18,07	0,711
123	16,82	0,662
124	13,57	0,534
125	13,72	0,540
130	13,82	0,544
135	14,38	0,566
140	14,72	0,580
145	14,88	0,586
150	15,30	0,602
155	15,88	0,625
180	17,00	0,669

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	17,5	6,9
2	38,5	15,2
3	60,0	23,6
4	82,5	32,5
5	107,0	42,1
6	132,0	52,0
7	165,0	65,0
8	191,5	75,4
9	219,0	86,2
10	248,0	97,6
11	279,0	109,8
12	320,0	126,0
13	360,0	141,7

Playfair Grant Vibration
13' 2" # 10
No. 4971 (18.10.1948)
spliced 553 g
"ordinary action"
over varnish 19,5 oz

Length (in)	Diam. (mm)	Diam. (in)
1	3,67	0,144
5	4,28	0,169
10	4,98	0,196
15	5,73	0,225
20	6,58	0,259
25	6,89	0,271
30	7,33	0,289
35	7,79	0,307
40	8,25	0,325
45	8,66	0,341
46	10,67	0,420
47	11,63	0,458
48	12,2	0,480
49	12,64	0,498
50	12,98	0,511
51	13,26	0,522
52	13,26	0,522
53	12,99	0,511
54	12,44	0,490
55	11,87	0,467
56	9,57	0,377
60	9,95	0,392
65	10,24	0,403
70	10,63	0,419
75	10,92	0,430
80	11,14	0,438
85	11,35	0,447
90	11,52	0,454
95	11,86	0,467
96	12,07	0,475
97	14,89	0,586
98	16,61	0,654
99	17,58	0,692
100	18,23	0,718
101	18,57	0,731
102	18,83	0,741
103	18,86	0,743
104	18,7	0,736
105	18,14	0,714
106	17,06	0,672
107	15,94	0,628
108	13,09	0,515
110	13,57	0,534
115	13,76	0,542
120	13,99	0,551
125	14,35	0,565
130	14,72	0,580
133	14,81	0,583
158	16,40	0,646

Guides, from top

Nr.	cm	in
0	0,0	0,0
1	21,0	8,3
2	42,0	16,5
3	65,5	25,8
4	90,5	35,6
5	115,5	45,5
6	145,0	57,1
7	174,0	68,5
8	205,5	80,9
9	239,0	94,1
10	279,0	109,8
11	312,0	122,8

Alexander Grant "Vibration Rod"
18' 0"
No. 128 (pre 1906)
spliced
without varnish

Length (in)	Diam. (mm)	Diam. (in)
0,0	3,97	0,156
3,8	4,76	0,188
11,5	6,35	0,250
20,5	7,94	0,313
31,0	9,53	0,375
50,0	11,11	0,438
66,0	12,70	0,500
72,0	17,22	0,678
77,5	13,49	0,531
83,1	14,29	0,563
95,1	15,08	0,594
107,1	15,88	0,625
119,1	16,27	0,641
131,1	16,67	0,656
139,2	25,40	1,000
147,3	18,26	0,719
159,3	19,45	0,766
171,3	20,24	0,797
183,3	21,03	0,828
195,3	21,83	0,859
204,3	22,23	0,875
216,0	22,23	0,875

"The property of Sir Thomas Burnett Crathes"

parts length, incl. splices
top 6' 6 1/2" = 78,500"
mid 6' 9 1/8" = 81,125"
butt 6' 10 7/8" = 82,875"

top splice length 11 1/2"
butt splice length 16 1/8"

top splice face = 0,563"
top splice thick = 0,339"

butt splice face = 0,750"
butt splice thick = 0,500"

Alexander Grant "Trout Special"
11' 0"
spliced
without varnish

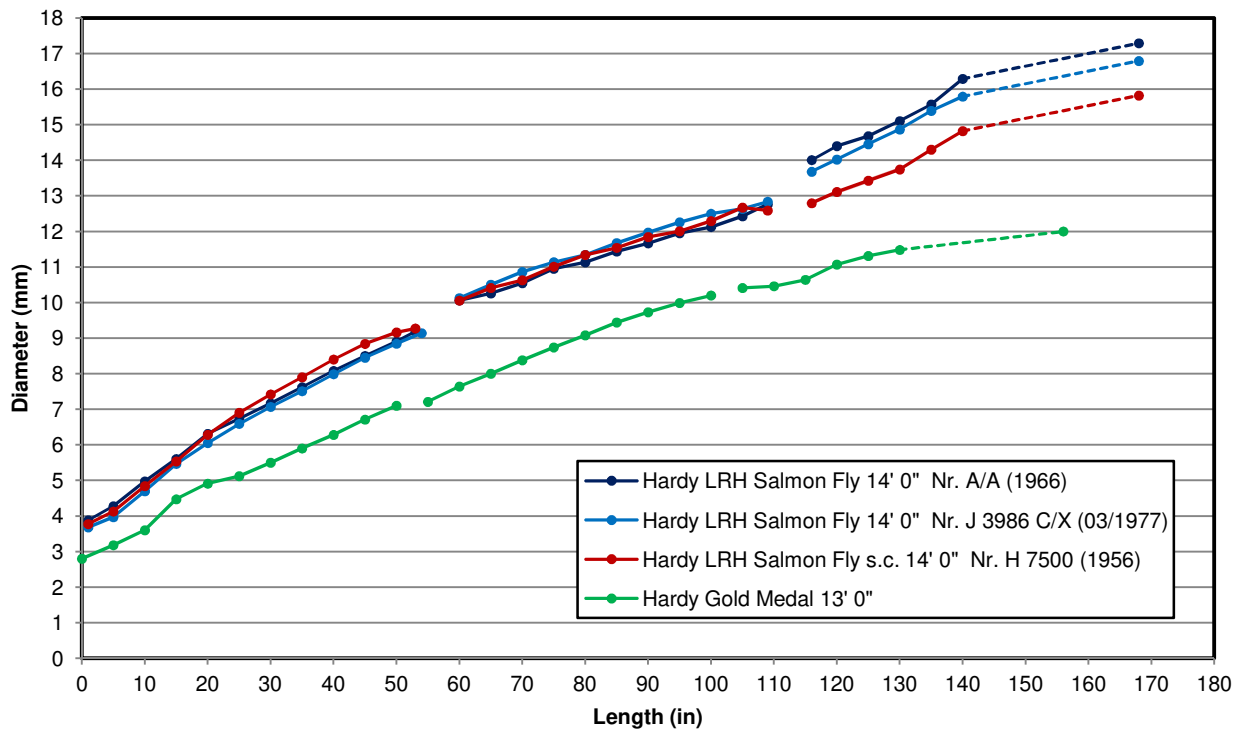
Length (in)	Diam. (mm)	Diam. (in)
0,0	2,38	0,094
5,0	3,57	0,141
11,5	4,37	0,172
19,0	5,16	0,203
27,5	5,95	0,234
37,0	6,75	0,266
47,5	7,54	0,297
59,0	7,94	0,313
67,8	9,13	0,359
79,8	9,92	0,391
91,8	10,72	0,422
103,8	11,51	0,453
115,8	12,30	0,484
127,8	13,10	0,516
132,0	13,10	0,516

"As made for Arch. Mc Laurin Esqu. "
9. July 1925

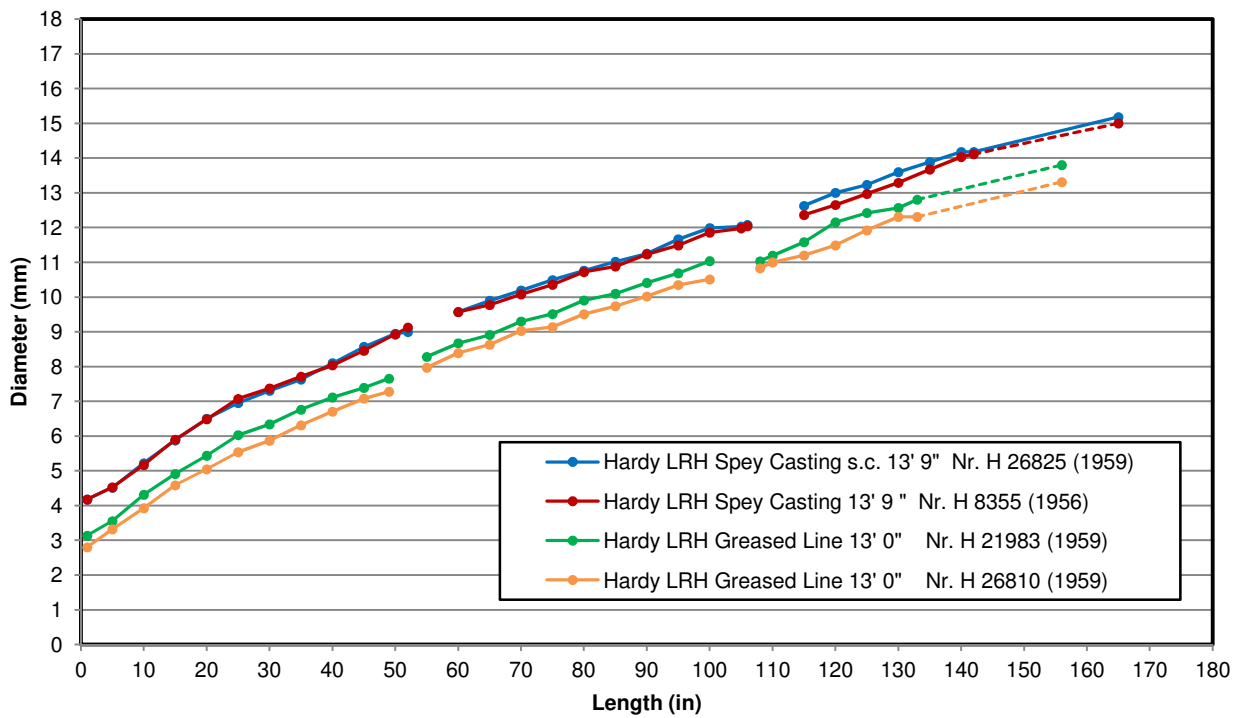
parts length, incl. splices
top 5 ft 7 3/4 in
butt 6 ft 1 in

splices length 8 3/4"

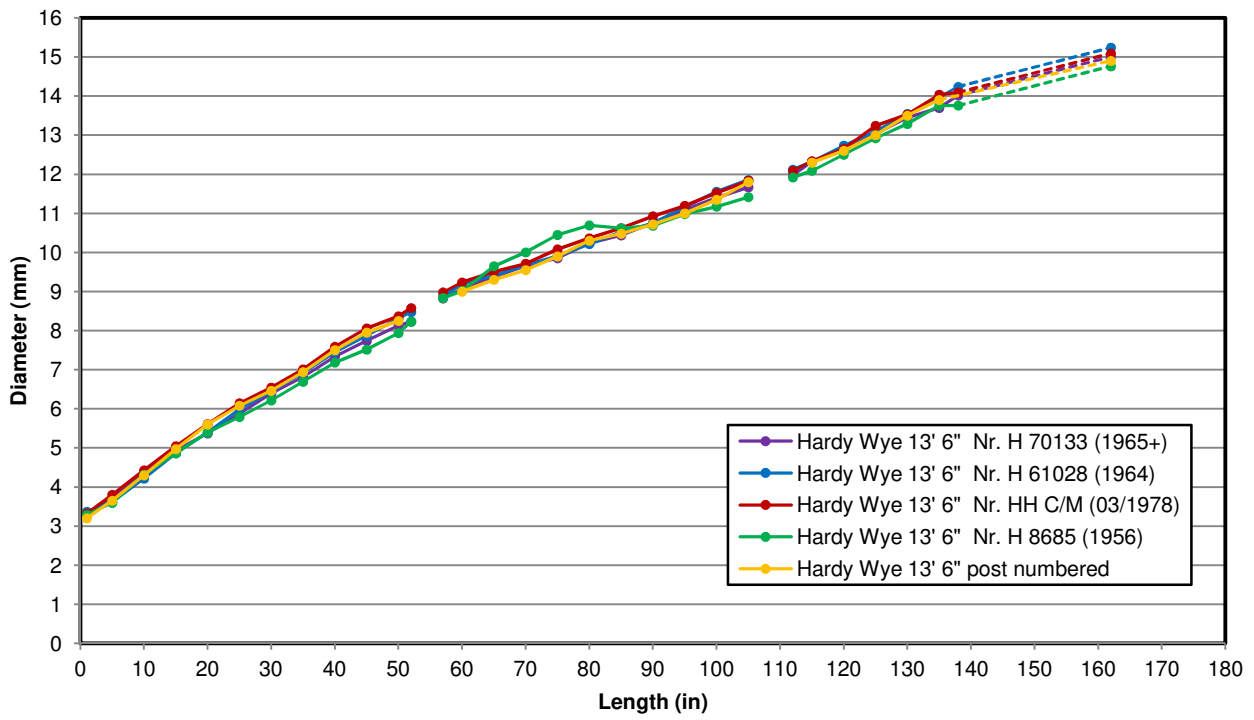
Hardy 1



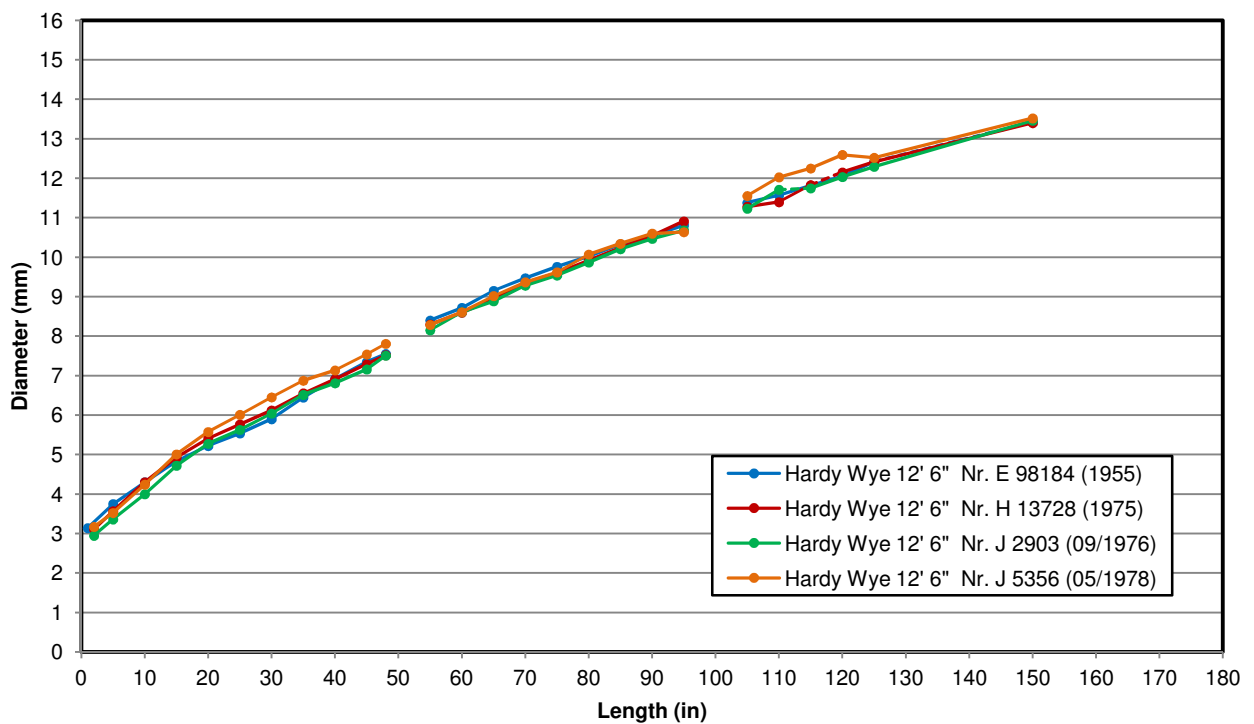
Hardy 2

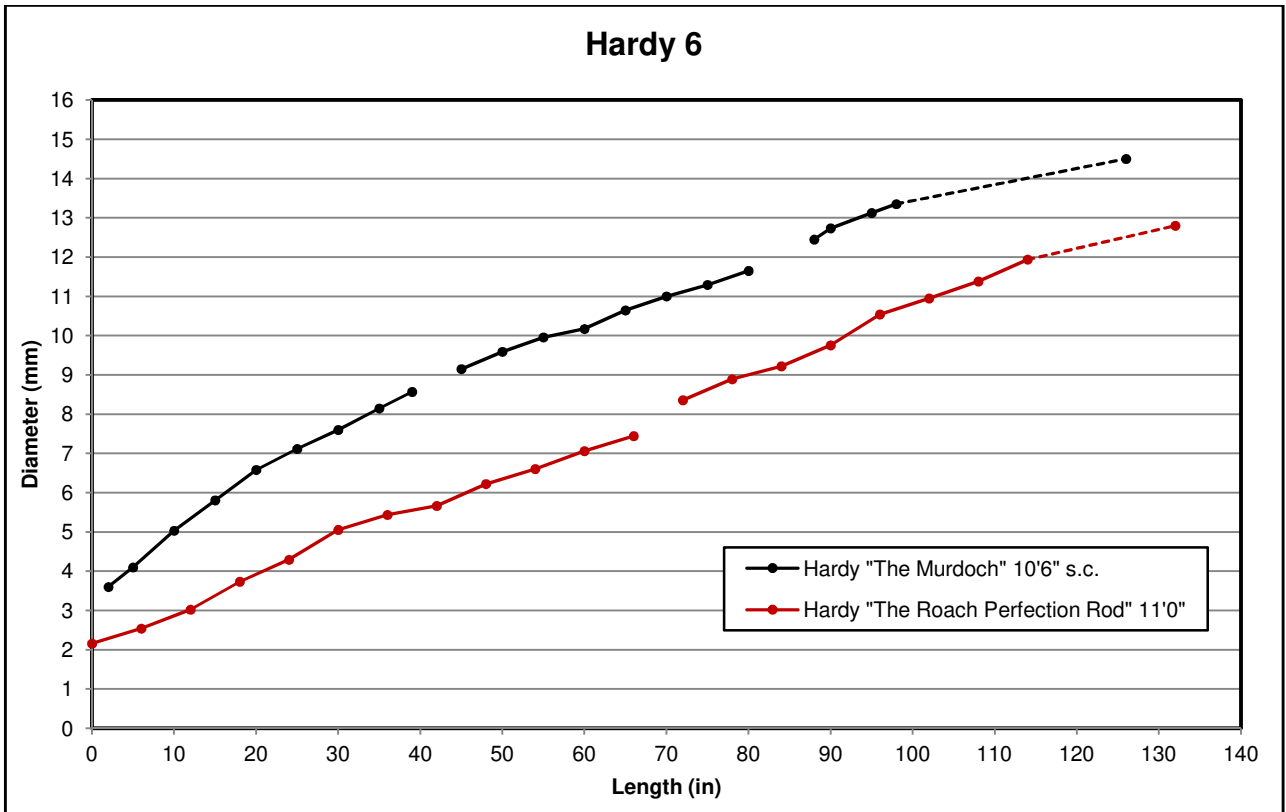
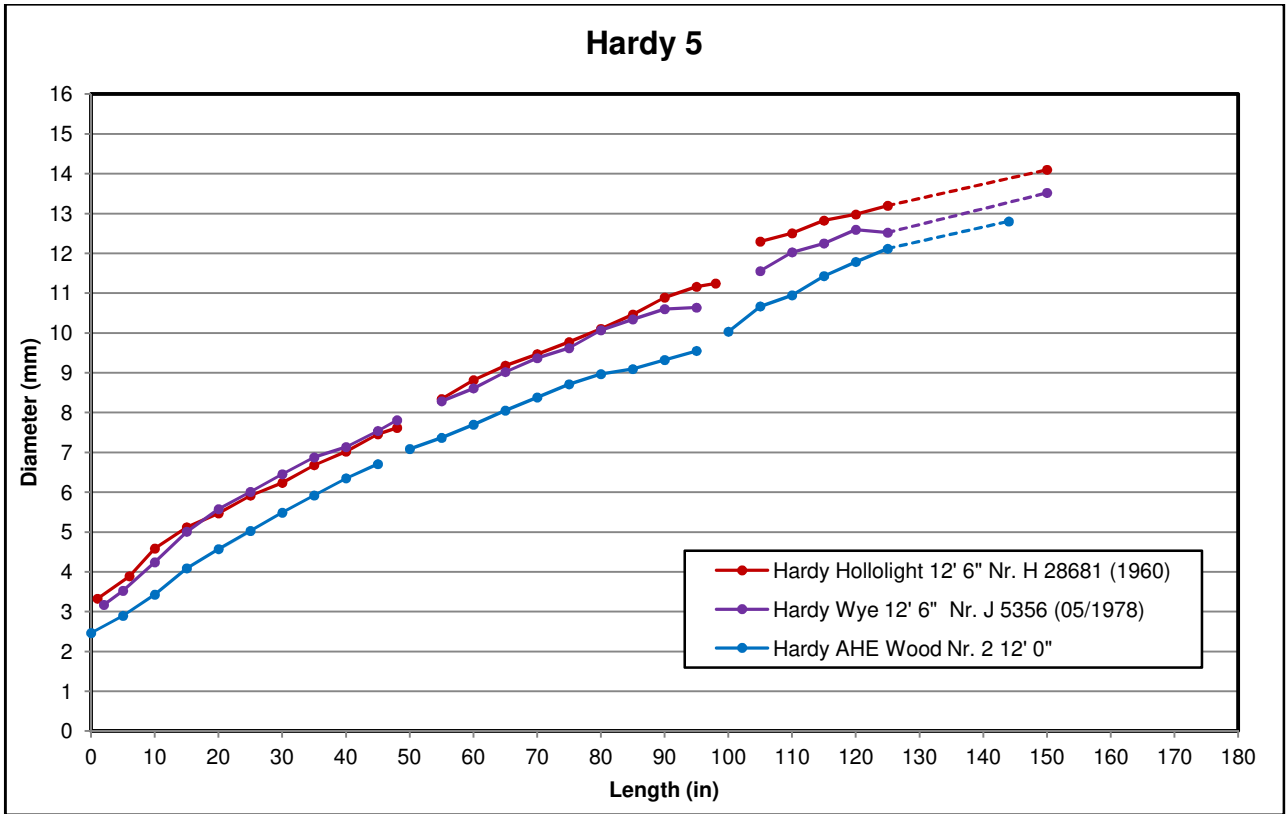


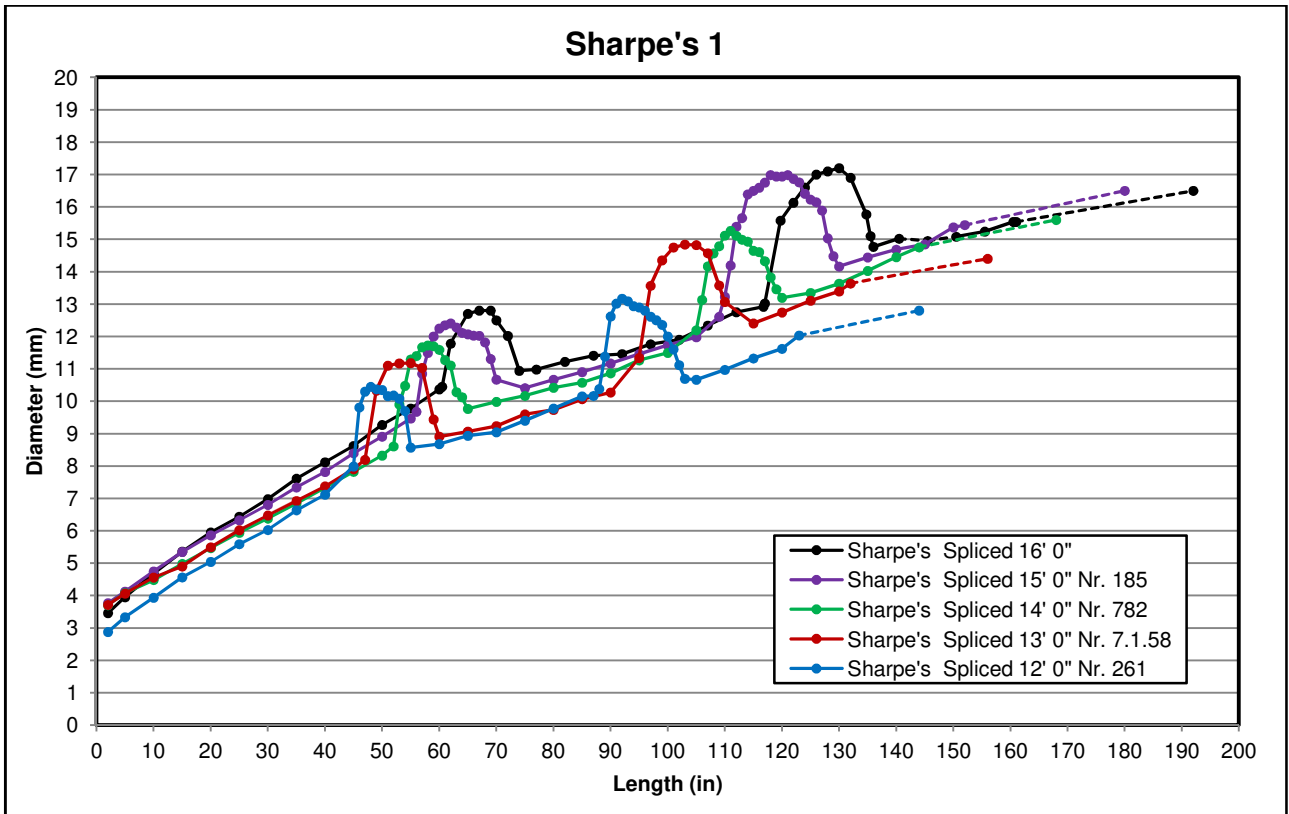
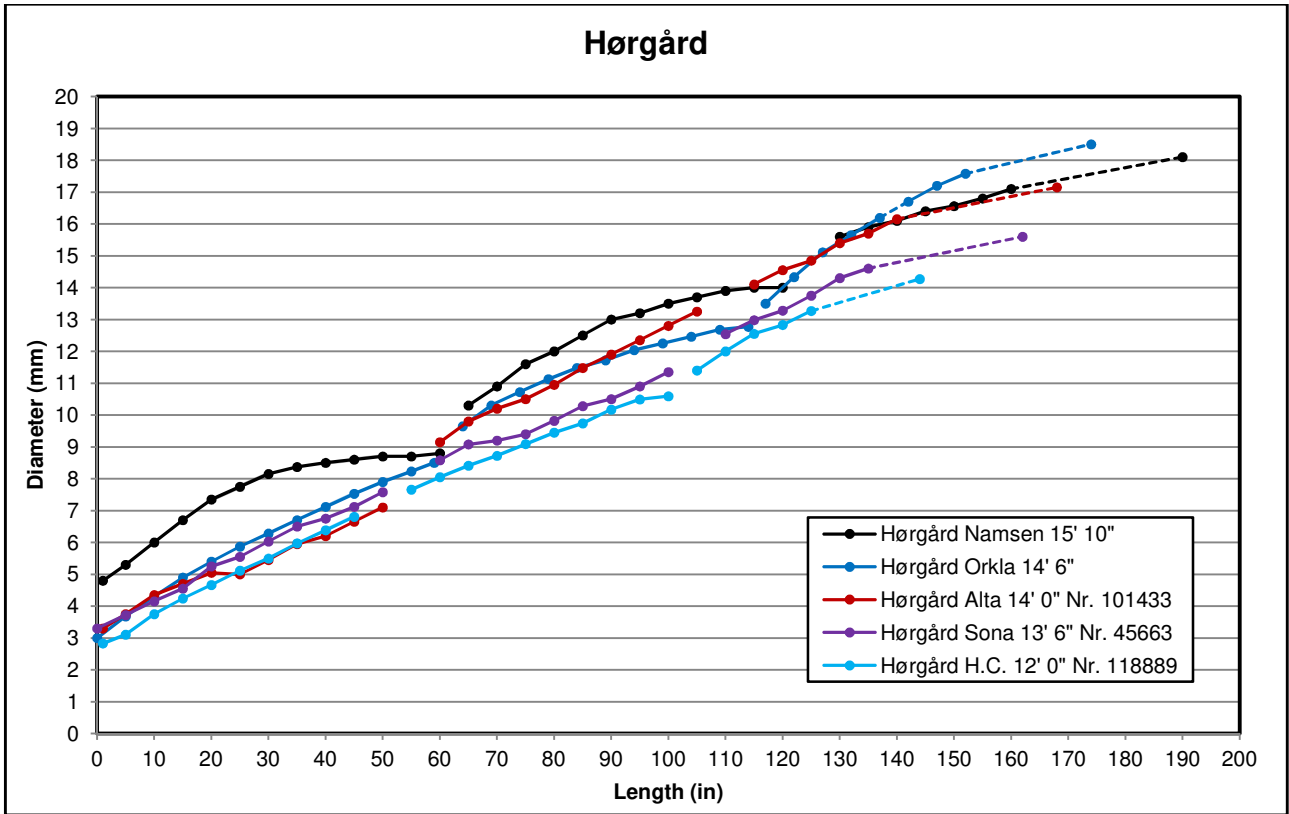
Hardy 3



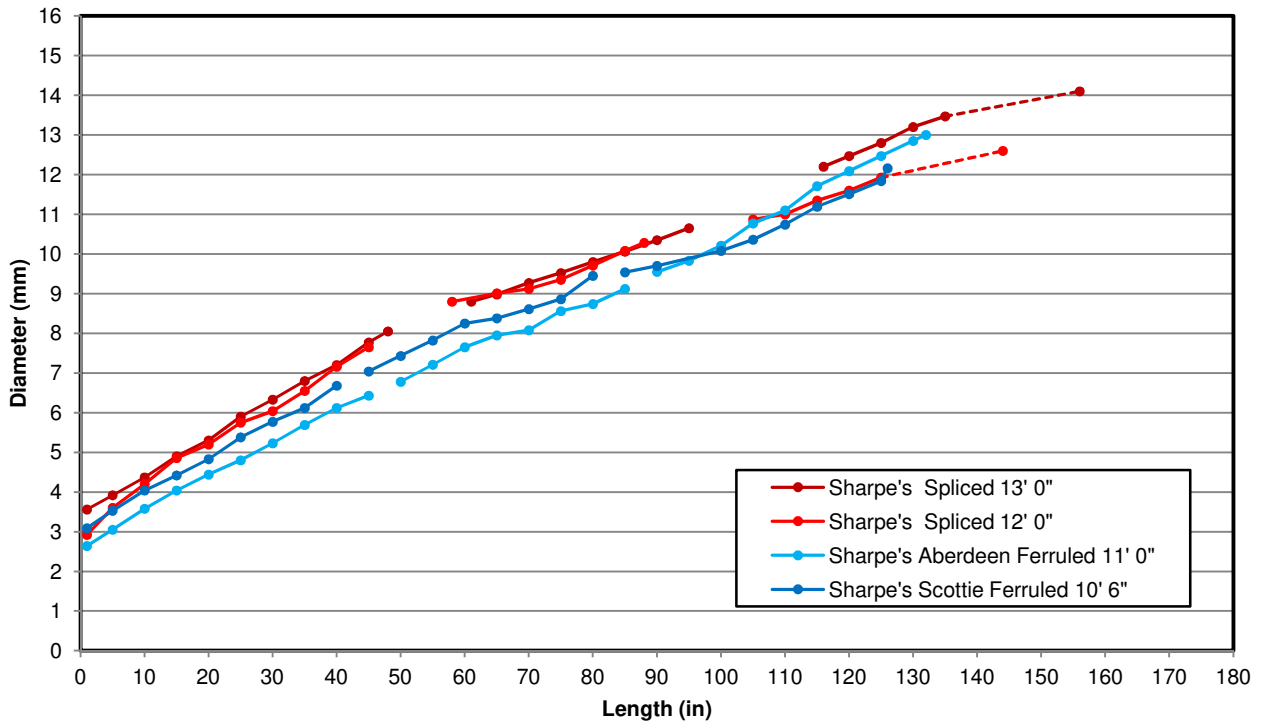
Hardy 4



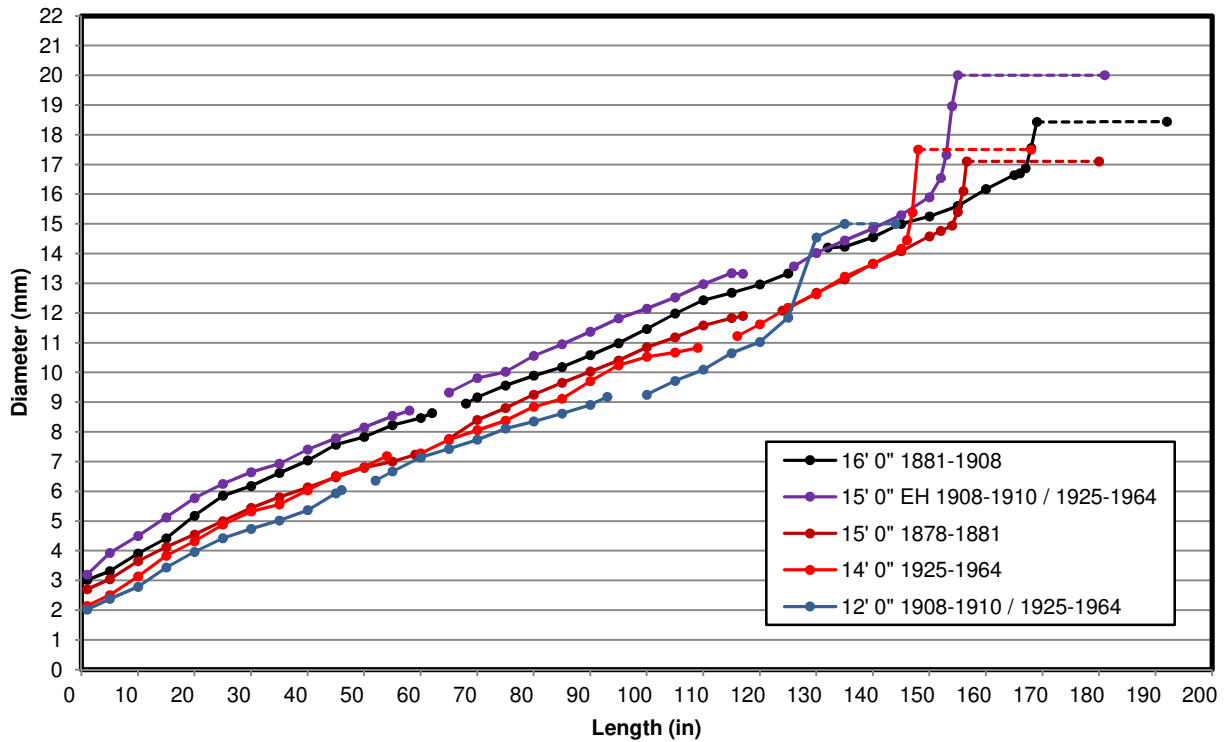


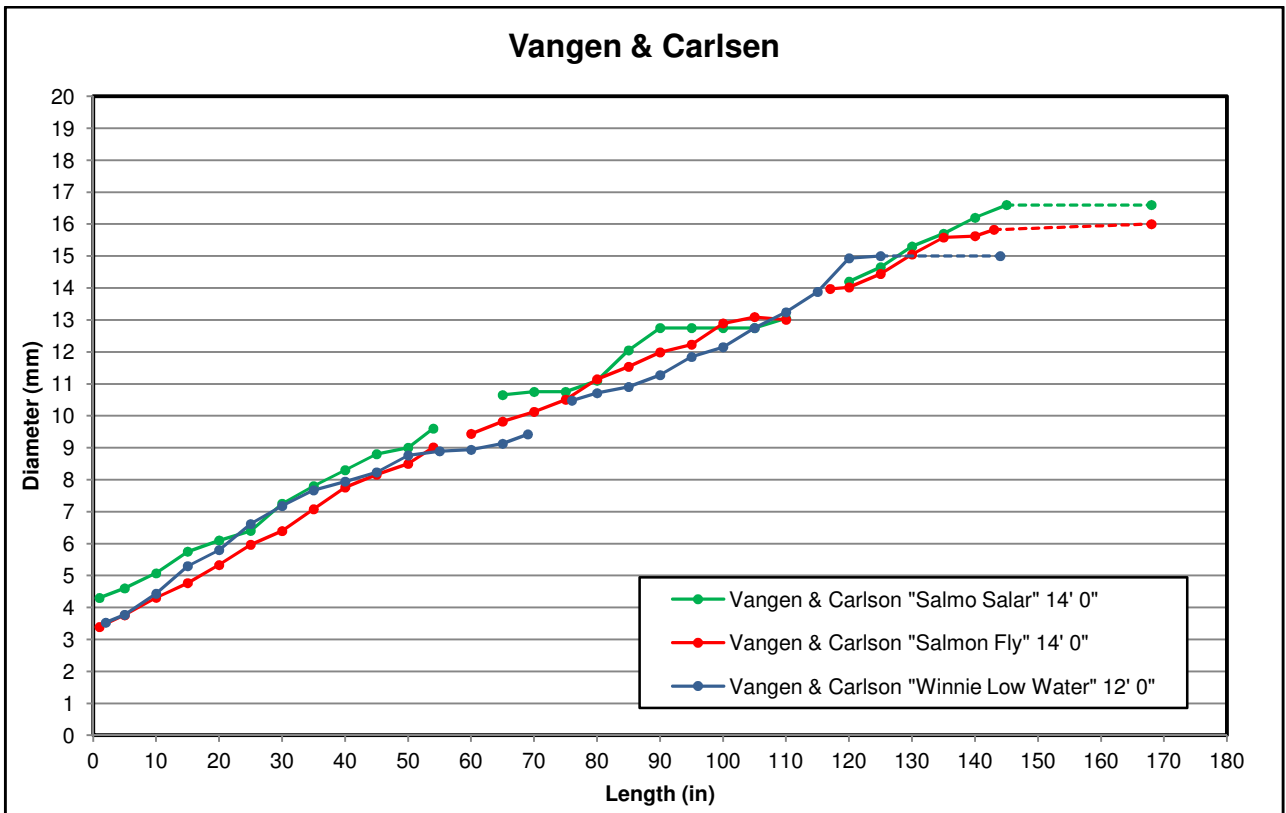
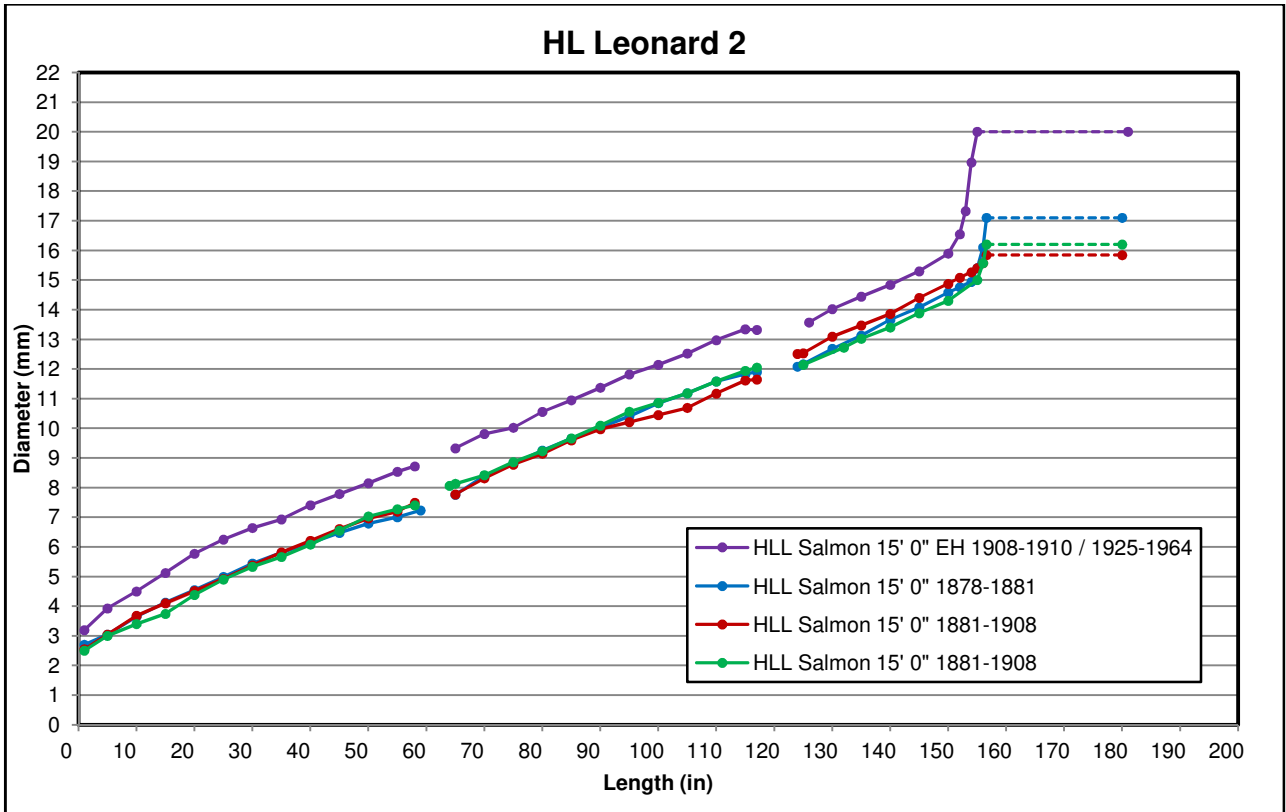


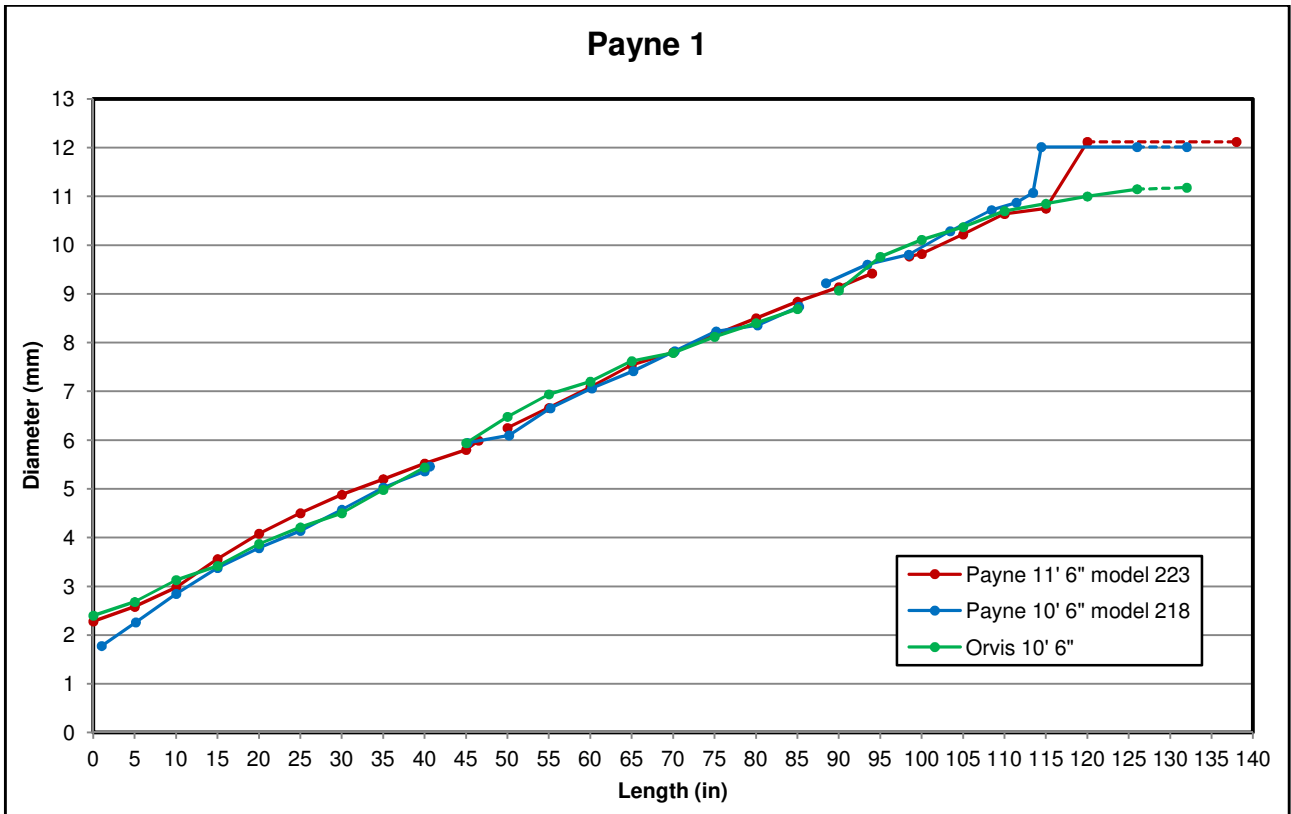
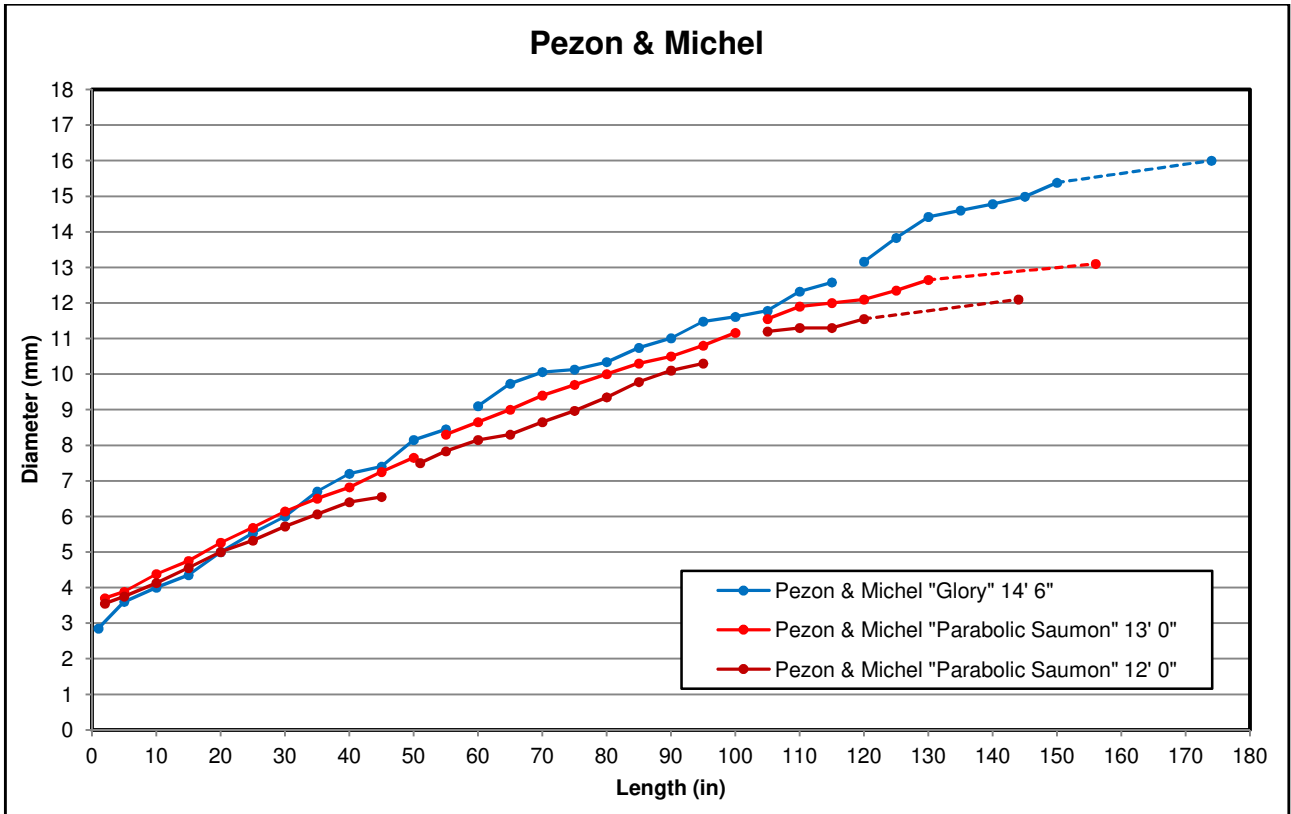
Sharpe's 2

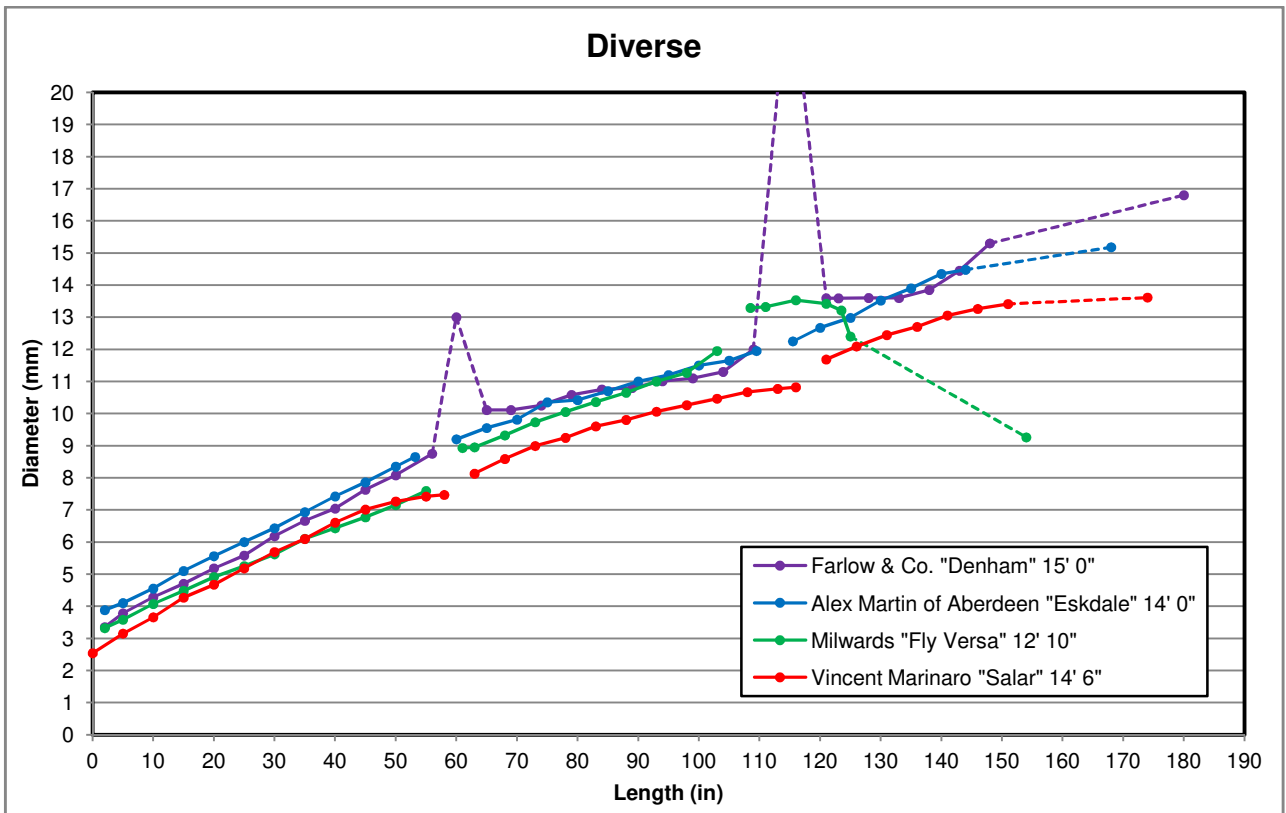
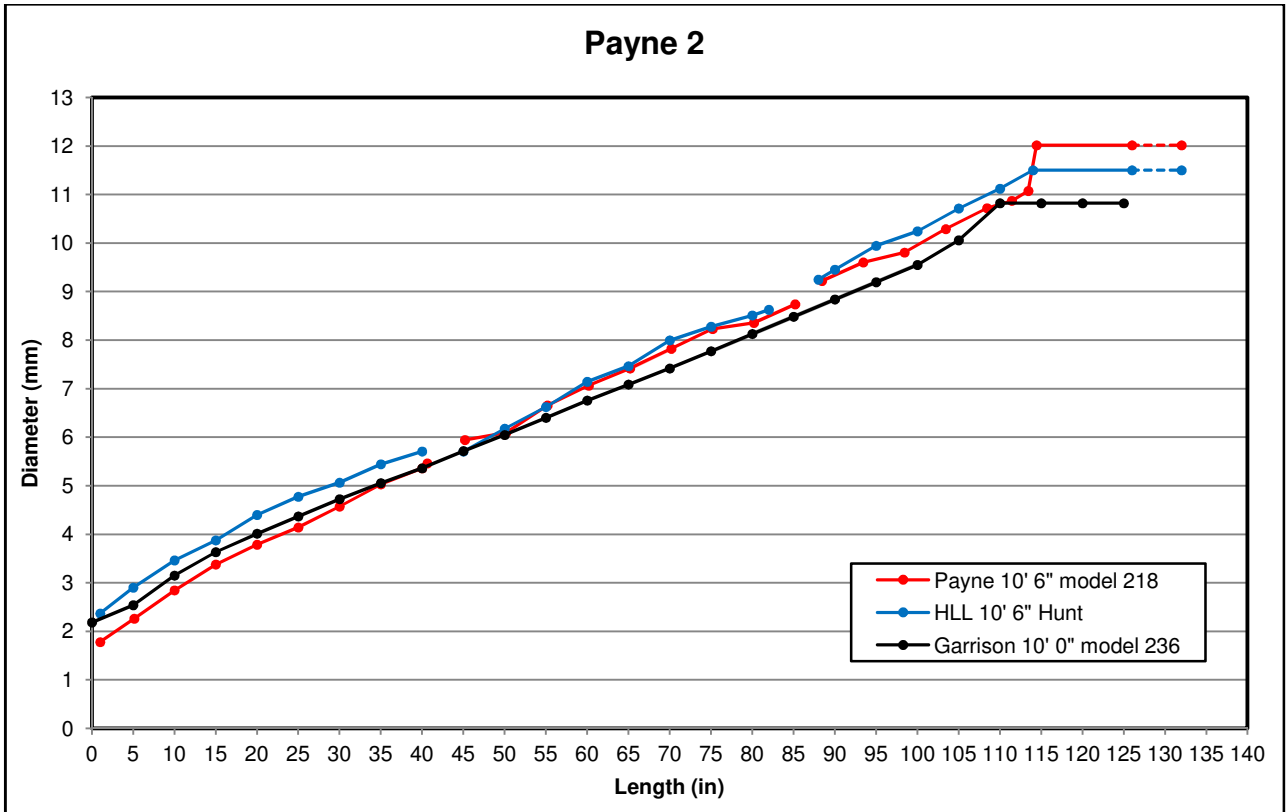


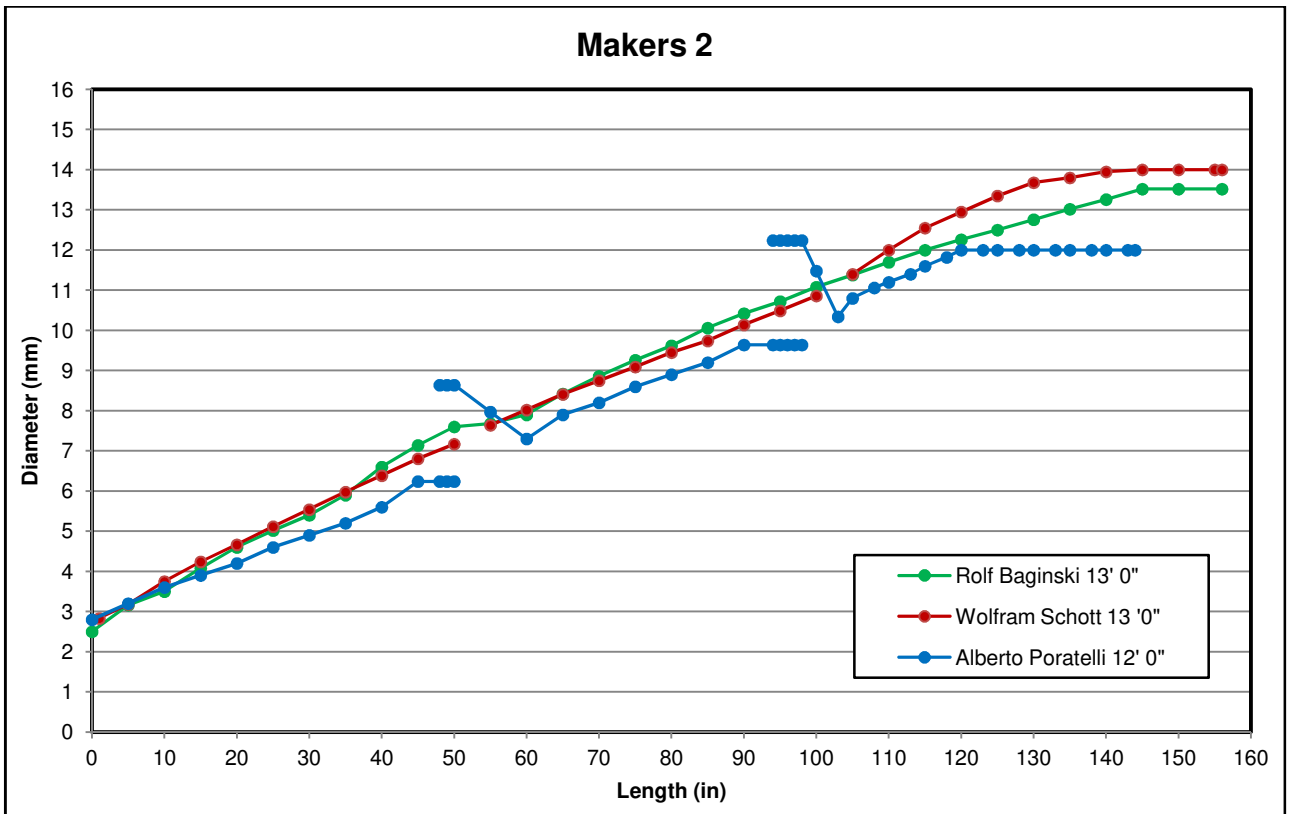
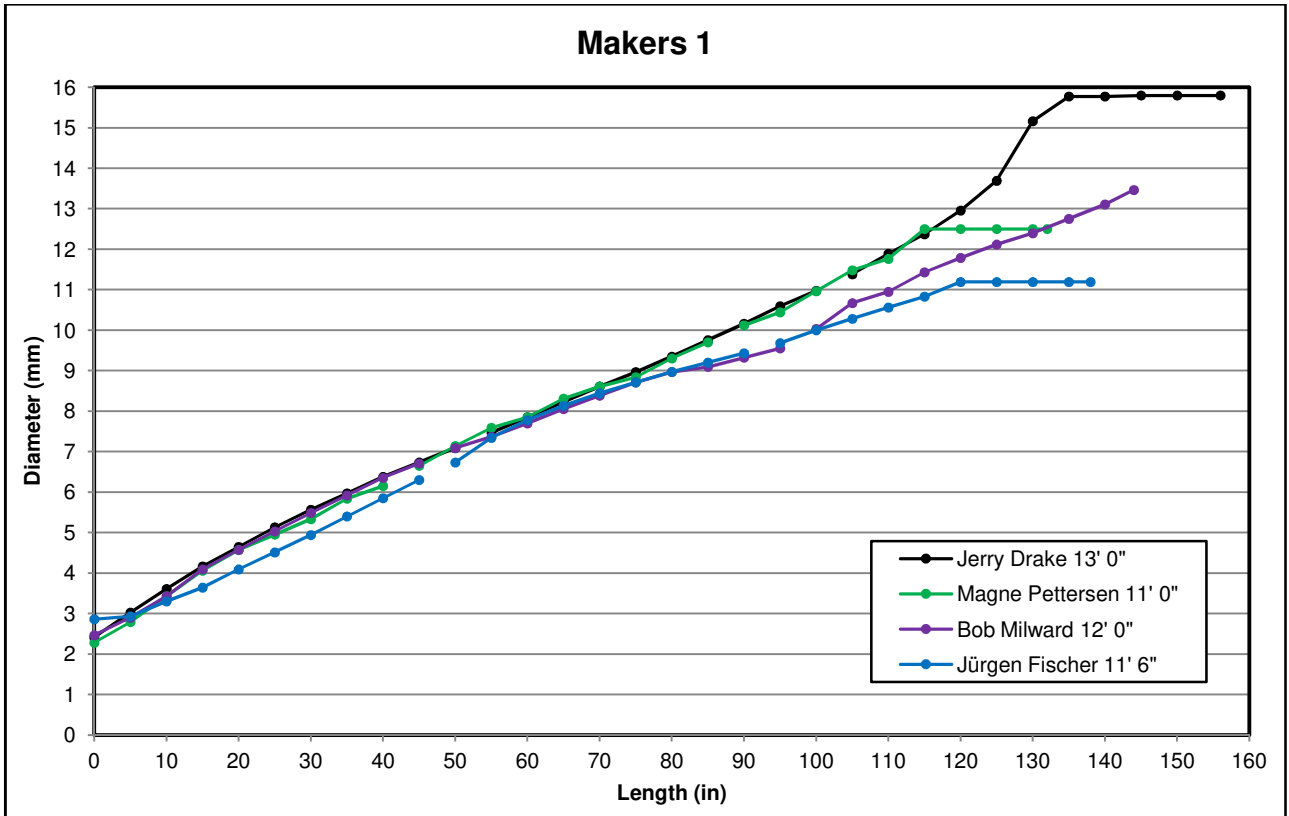
HL Leonard 1



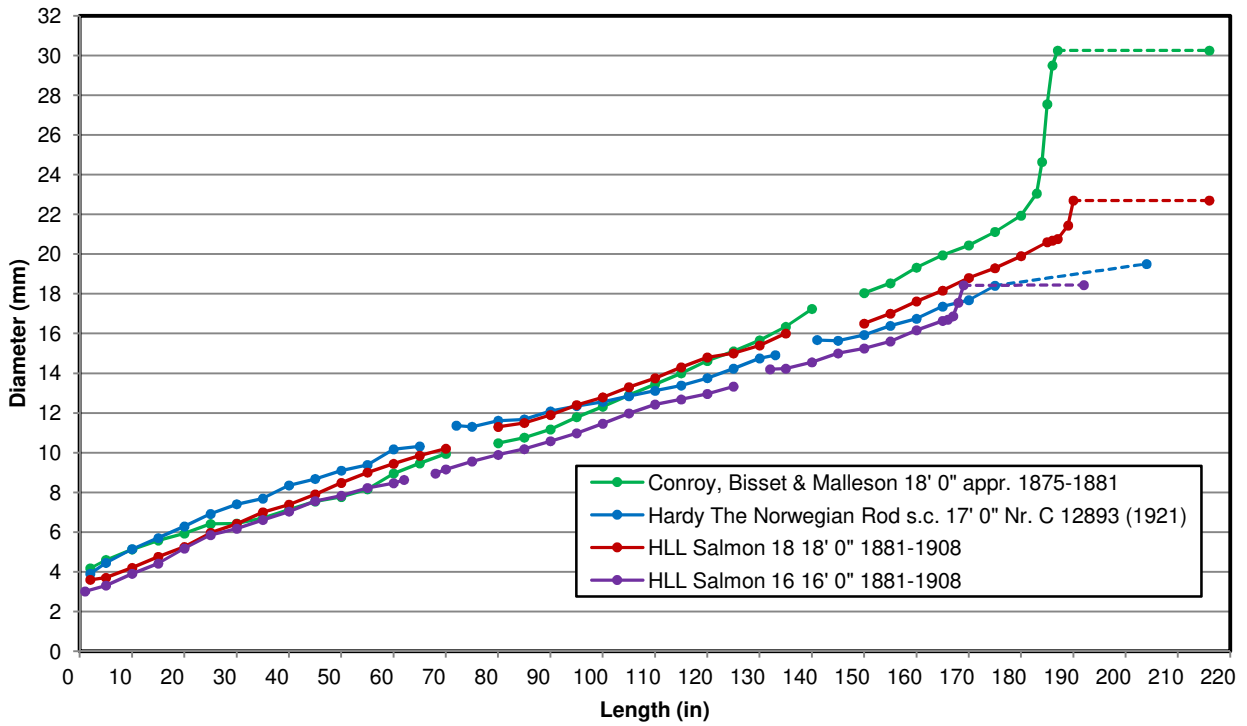




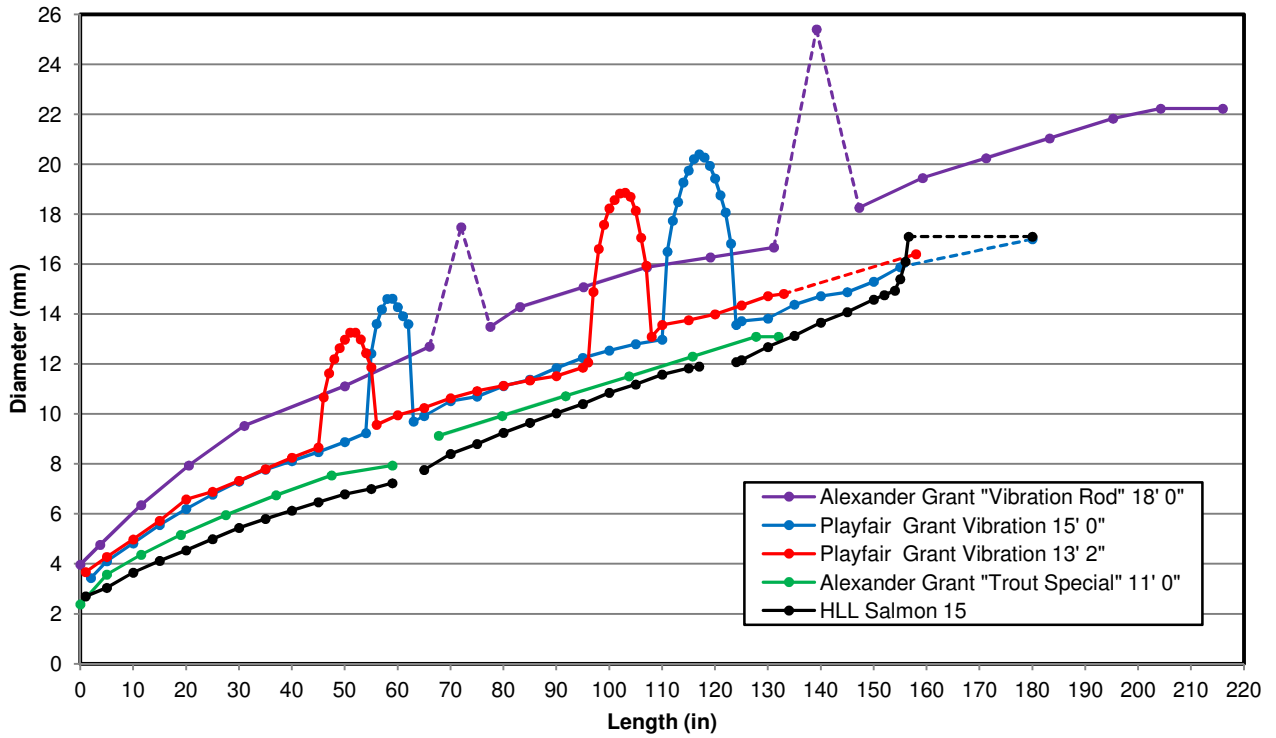




Loong Rods

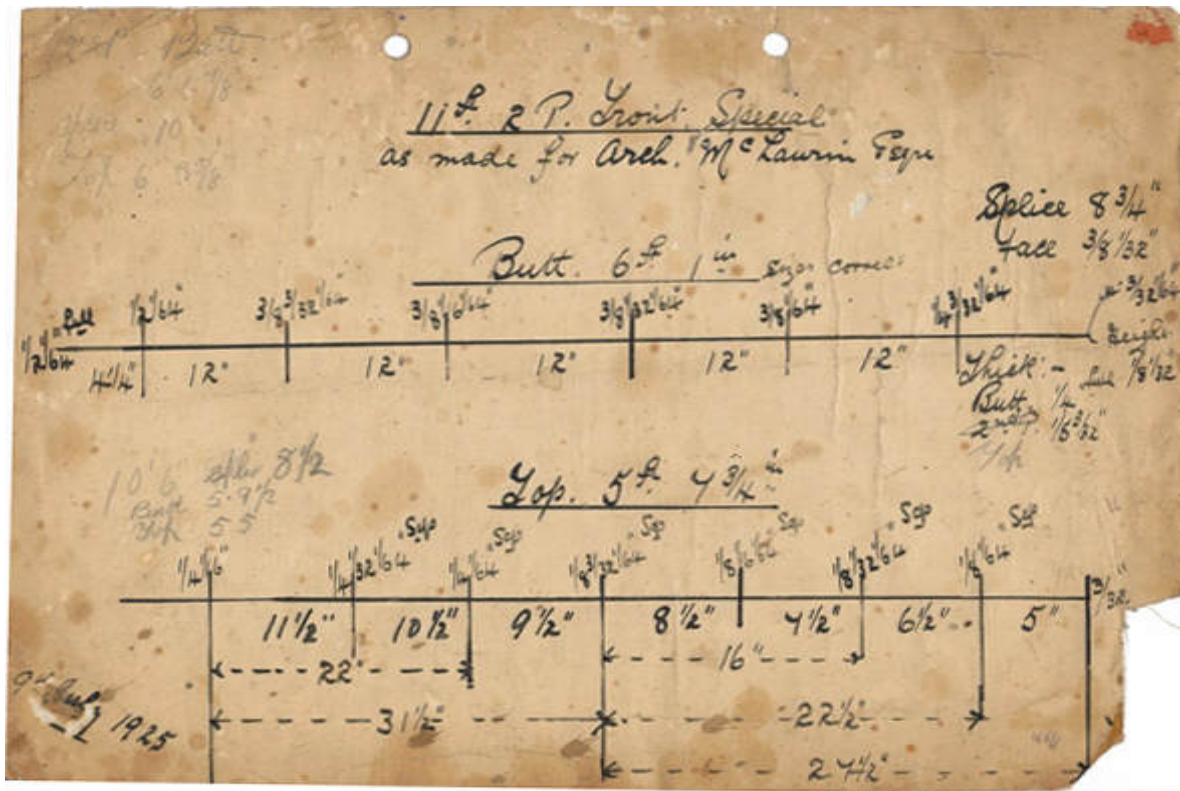


Grant Vibration, Greenheart





Taper - sheet rod nr. 94: "17 ft 10 3/4" Vib. Rod (No. 128). The property of Sir Thomas Burnett Crathes". Bottom left: "... had originally been 18 ft 3/22"



Taper - sheet rod nr. 95: "11 ft. 2 P. Trout Special as made for Arch. Mc Laurin Esqu." Bottom left corner: "9th July 1925"

Charles Playfair of Aberdeen Grant Vibration

Rod No. 3616:

15' Salmon, blank finished 1/9/36, weight 21 ¼ oz., rod finished 17/9/36 weight 25 ½ oz.
Medium action, snake rings, agate butt and end, made for H. Swan, Ware (part of a pair of rods).

Rod No.4971:

13' 3 pc. Blank finished 11/10/48 16 ½ oz., rod finished 18/10/48 weight 19 ½ oz.
Ordinary action, snake rings, hoop butt and end, made for D. E. Hely Hutchinson, Bath (who also had a 12' rod made at the same time).

Alexander Grant "Vibration Rod" 18' 0". Notes on taper-sheet: "The property of Sir Thomas Burnett Crathes"							
parts length, incl. splices						(= in)	(= mm)
Butt	6 ft 10 7/8 in	= 82,875"	butt/mid	Splice	16 1/8	16,13	409,6
2nd Piece	6 ft 9 1/8 in	= 81,125"		Face	3/4 full	0,75	19,1
Top	6 ft 6 1/2 in	= 78,500"		Thick	1/2 full	0,50	12,7
			mid/top	Splice	11 1/2	11,50	292,1
				Face	1/2 1/16 full	0,56	14,3
				Thick	1/4 3/32 full	0,34	8,6
Alexander Grant "Trout Special" 11' 0". Notes on taper-sheet: "As made for Arch. Mc Laurin Esqu."							
parts length, incl. splices						(= in)	(= mm)
				Splice	8 3/4	8,75	222,3
				Face	3/8 1/32	0,41	10,3
				Thick	1/8 1/32	0,28	7,2
Butt	6 ft 1 in	sizes correct		Butt	1/4	0,25	6,4
Top	5 ft 7 3/4 in			Top	1/8 3/32	0,22	5,6

The Glasgow Herald, Thursday, January 26, 1926

Death of Sir Thomas Burnett of Leys

The death took place yesterday morning at his residence, Crathes Castle, near Banchory, Deeside, of Sir Thomas Burnett, 12th Baron of Leyth. He was 85 years of age, and had been in failing health for some time. Sir Thomas was the second son of Sir James Horn Burnett, the 10th Baronet, Lieutenant and Sheriff Principal of Kincardineshire, and succeeded to the title on the death in 1894 of his elder brother, Sir Robert Burnett. Sir Thomas was a soldier by profession, and served for many years in the Royal Horse Artillery, returning with the rank of Colonel in 1890. From the time of his taking up his residence at Crathes Castle he manifested an active interest in public affairs. For many years he presided as convener over Kincardineshire County Council, where his business abilities, public-spiritedness, and tact were recognized and appreciated. He vacated that office following on his appointment in January, 1918, as Lord Lieutenant of Kincardine in succession to the late Sir Alexander Baird, Bt. of Urie. Sir Thomas was a J. P. and a Deputy Lieutenant for the City of Aberdech, and also for Aberdeenshire.

On his own property and in the neighbourhood Sir Thomas was held in warm regard. In Aberdeen he will be long remembered for the devoted service which he rendered to the Sick Children's Hospital, the chairmanship of which he held until a recent date.

He is survived by Lady Burnett, who is the eldest daughter of the late Mr. James Cumine of Rattrav, Peterhead; and by two sons -Lieutenant-Colonel James Lauderdale Gilbert Burnett, C.M.G., D.S.O., commanding the 2nd Gordon Highlanders, and Major Alexander Edwin Burnett, O.B.E., who is president of the Kincardineshire Branch of the British Red Cross Society.

<http://www.burnett.uk.com/>
https://en.wikipedia.org/wiki/Crathes_Castle

Milwards

Milwards "Fly Versa" rod (no. 76) is remarkable. It features a reversed taper under the handle. This could not be measured, but an educated guess is given. See graph.

Originally designed as a "Swimversa", more rods were added to the line, like "Spinversa", "Flyversa", "Craftversa", and others. The reverse taper butt was first offered to the public on a spinning rod, the "Spinversa".

Milwards obviously had faith in the idea as they went to the trouble and expense of getting a European Patent on the reverse taper butt. A most tortuous and complicated bit of English text.

Patent (relating to Swimversa) :

http://worldwide.espacenet.com/publicationDetails/originalDocument?CC=GB&NR=859961A&KC=A&FT=D&ND=4&date=19610125&DB=EPODOC&locale=en_EP

Excerpt:

" ...In a fishing rod comprising a handle portion, an intermediate portion, and a top portion, the stiffness of the handle portion decreases towards its free end and has an average value which is less than that of the adjacent lower portion of the intermediate portion. The stiffness of the handle decreases more rapidly along the portion adjacent its upper end than it does along the portion adjacent its free end. The handle comprises a core of hexagonal cross section and a cork sleeve. The core is tapered from the upper end to the lower end, the tapering being greater for the first one third of its length from the upper end. The cork sleeve tapers for the first one third of its length from the upper end, is cylindrical for the next third and tapers again for the last third. Two rings having recesses for receiving the ends of a mounting plate for a reel are adjustably secured to the cork sleeve. The intermediate and top portions of the rod taper from their lower ends to their top ends and are formed in sections, some of which are hexagonal in section, others circular. The rod may be made of cane, steel rod or tube, or fibre glass rod or tube..." [...] "...The stiffness of the handle portion varies along the length of the handle portion in such a manner that adjacent to its upper end it is from two times to five times greater than the stiffness adjacent to its bottom or free end. Preferably the stiffness decreases more rapidly along that part of the handle portion adjacent to its upper end than it does along that portion adjacent to the lower or free end of the handle portion..."

J. S. Sharpe of Aberdeen

Information about Sharpe can be found here:

http://www.feathersfliesandphantoms.co.uk/j_s_sharpe_32.html

<http://sharpes.net/ekmps/shops/sharpes/resources/Other/sharpe-s-rod-numbering-system.pdf>

J.S. Sharpe (Fishing Tackle) Ltd.

Fishing Rod numbers from 1st Jan. 1958 until closure Dec. 1982

The earliest 1958 rod numbers were on a straight number basis.

In August 1959 the number came to 9999 and a new system was started with a year number, space, then an ascending number to 999 after which the 2 became a 3 and so on.

1958	7779	to	9099
1959	9100	to	9999
	2 100	to	2 615
1960	2 616	to	2 999
	3 001	to	3 999
	4 001	to	4 321
1961	4 322	to	4 999
	5 001	to	5 999
	6 001	to	6 578
1962	6 579	to	6 999
	7 001	to	7 999
	8 001	to	8 999
	9 001	to	9 004
1963	9 005	to	9 999

At this point the system was again changed to a reversal of the year in the 1960's and the month of manufacture. This system started June 1963 which therefore became 36 and hence July 1963 was 37 and so on.

36 to 312 with rod number in that month and year added after a space. Hence 50th rod made in Nov. 1963 would be 311 50.

1964	41	to	412	plus number in month
1965	51	to	512	plus number in month

And so on until end December 1969 which was 912 plus number in month

1970	701	to	712	plus number in month
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Jan. 1971 the system again changed to a single number for the year, a - , then the rod number in that month. This continued throughout the 1970's.

i.e. 87th rod made April 1971 was 1-4 87
56th rod made Oct. 1979 was 9-10 56

1980	801	to	812	without the -
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1981 The system then reverted to the reversal system of the 1970's.
Hence Jan. 1981 was 181 and Dec. 1981 was 1281

1982	182	to	1282
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The final rod number before the closure was 1282 60 i.e. the 60th rod made in Dec. 1982

The above information as a chart with all the codes from 1958 to the end of production.
The xx refers to the rod number within that month of production.
For example 7-8 44 would be the 44th rod produced in August 1977.

1958	7779	9099											
1959	9100	9999	2 100	2 615									
1960	2 616	2 999	3 001	3 999	4 001	4 321							
1961	4 322	4 999	5 001	5 999	6 001	6 578							
1962	6 579	6 999	7 001	7 999	8 001	8 999	9 001	9 004					
1963						June	July	Aug	Sept	Oct	Nov	Dec	
	9 005	9 999				36 xx	37 xx	38 xx	39 xx	310 xx	311 xx	312 xx	
1964	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	41 xx	42 xx	43 xx	44 xx	45 xx	46 xx	47 xx	48 xx	49 xx	410 xx	411 xx	412 xx	
1965	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	51 xx	52 xx	53 xx	54 xx	55 xx	56 xx	57 xx	58 xx	59 xx	510 xx	511 xx	512 xx	
1966	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	61 xx	62 xx	63 xx	64 xx	65 xx	66 xx	67 xx	68 xx	69 xx	610 xx	611 xx	612 xx	
1967	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	71 xx	72 xx	73 xx	74 xx	75 xx	76 xx	77 xx	78 xx	79 xx	710 xx	711 xx	712 xx	
1968	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	81 xx	82 xx	83 xx	84 xx	85 xx	86 xx	87 xx	88 xx	89 xx	810 xx	811 xx	812 xx	
1969	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	91 xx	92 xx	93 xx	94 xx	95 xx	96 xx	97 xx	98 xx	99 xx	91 xx	911 xx	912 xx	
1970	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	701 xx	702 xx	703 xx	704	705 xx	706 xx	707 xx	708 xx	709 xx	710 xx	711 xx	712 xx	
1971	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	1-1 xx	1-2 xx	1-3 xx	1-4 xx	1-5 xx	1-6 xx	1-7 xx	1-8 xx	1-9 xx	1-10 xx	1-11 xx	1-12 xx	
1972	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	2-1 xx	2-2 xx	2-3 xx	2-4 xx	2-5 xx	2-6 xx	2-7 xx	2-8 xx	2-9 xx	2-10 xx	2-11 xx	2-12 xx	
1973	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	3-1 xx	3-2 xx	3-3 xx	3-4 xx	3-5 xx	3-6 xx	3-7 xx	3-8 xx	3-9 xx	3-10 xx	3-11 xx	3-12 xx	
1974	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	4-1 xx	4-2 xx	4-3 xx	4-4 xx	4-5 xx	4-6 xx	4-7 xx	4-8 xx	4-9 xx	4-10 xx	4-11 xx	4-12 xx	
1975	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	5-1 xx	5-2 xx	5-3 xx	5-4 xx	5-5 xx	5-6 xx	5-7 xx	5-8 xx	5-9 xx	5-10 xx	5-11 xx	5-12 xx	
1976	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	6-1 xx	6-2 xx	6-3 xx	6-4 xx	6-5 xx	6-6 xx	6-7 xx	6-8 xx	6-9 xx	6-10 xx	6-11 xx	6-12 xx	
1977	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	7-1 xx	7-2 xx	7-3 xx	7-4 xx	7-5 xx	7-6 xx	7-7 xx	7-8 xx	7-9 xx	7-10 xx	7-11 xx	7-12 xx	
1978	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	8-1 xx	8-2 xx	8-3 xx	8-4 xx	8-5 xx	8-6 xx	8-7 xx	8-8 xx	8-9 xx	8-10 xx	8-11 xx	8-12 xx	
1979	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	9-1 xx	9-2 xx	9-3 xx	9-4 xx	9-5 xx	9-6 xx	9-7 xx	9-8 xx	9-9 xx	9-10 xx	9-11 xx	9-12 xx	
1980	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	801 xx	802 xx	803 xx	804 xx	805 xx	806 xx	807 xx	808 xx	809 xx	8010 xx	8011 xx	8012 xx	
1981	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	181 xx	281 xx	381 xx	481 xx	581 xx	681 xx	781 xx	881 xx	981 xx	1081 xx	1181 xx	1281 xx	
1982	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	182 xx	282 xx	382 xx	482 xx	582 xx	682 xx	782 xx	882 xx	982 xx	1082 xx	1182 xx	1282 xx	

Final rod no.: 1282 60

Hørgård bamboo rod models listed in catalogues from ca. 1950 to 1985:

Single Handed Trout Fly Rods	Double Handed Salmon Fly Rods	Spinning/Coarse Fishing Rods
Aura, 9' 0"	Alta, 14' 0"	Caster, 5' 3"
Bua, 9' 0"	Etna, 14' 0" (2 pc., butt cane, top glass)	Driva, 12' 6"
Distanse, 9' 6"	Fellow, 12' 6"	Esox III, 7'
Ena, 9' 0", 9' 6"	H. A., 12' 9"	Etna Surf, 12' 6" (butt cane, top glass)
Flua, 9' 0"	H. B., 12' 9"	Ferder, 9' 3"
Golden Fly, 8'0", 8' 6", 9' 0", 9' 6",	H. C., 12' 0"	Glomma, 6' 6" (1 pc.)
Junior, 7' 6"	H. D., 11' 0"	Gula, 11' 0"
Konkurranse B, 9' 3"	Namsen, 15' 6", 15' 0", 14' 6"	H 4, 5' 6"
Konkurranse D, 9' 0"	Orkla, 14' 6"	Lillemor Flue-Spinn D'Luxe, 8' 6"
Konkurranse E, 8' 6"	Skauga, 13' 6"	Lista, 9' 3"
Konkurranse ED, 8' 6"	Sona, 13' 6"	Model 21, 10' 3"
Konkurranse F, 9' 6"	Splittfly, 14' 0" (2 pc. !)	Sjoa, 5' 6"
Konkurranse Type 27, 9' 6"	Tana, 13' 6"	Skreppa, 6' 0"
Lågen, 10' 6"		Spinn, 9' 3"
Light Fly, 9' 0"		Spinn glass, 9' 6" (butt cane, top glass)
Lillemor, 8' 6"		Spinning, 9' 3"
Mount Royal, 8' 8"		Splitcast, 5' 6"
Nea, 9' 0"		Splittglass, 9' 3" (butt cane, top glass)
Nidelv, 9' 0"		Steel-Cane A, 5' 0" (1 pc.)
Prince, 9' 3"		Steel-Cane B, 5' 0" (1 pc.)
Silver Fly, 9' 0"		Surna, 10' 0"
Special, 9' 6"		Terna, 8' 0"
Turist, 8' 0" (4 pc.)		Threadline 1/0, 7' 6"
Tya, 9' 6"		Threadline 1A, 6' 9"
Type B, 8' 6"		Threadline 1B, 6' 9"
Vesla, 6' 6", 7' 0", 7' 6", 8' 0"		Threadline 2/0, 7' 0"
Veslemøy, 8' 6"		Threadline 2A, 6' 9"
		Threadline 2B, 6' 9"
"Olympicane" -set, containing a 3 pc/2 top rod, 3 ½ " reel, 20 yd line, 2 pc. "Stone Fly" imitations, illustrated instruction booklet about fly casting		Threadline Junior, 5' 6" (1 pc.)
		Ula, 6' 0"
		Warlock, 10' 3"



From left: 14 foot Sharpes Spliced, 15 foot Playfair Grant Vibration, both with splice protectors in place, 17 foot Hardy "The Norwegian Rod", s.c. = Steel Centred



From top: HLL 15' EH, HLL 14', HLL 12', Schott 14' 6", Schott 12' 6"



Hardy "The Norwegian Rod" guides and intermediates



Hardy "The Norwegian Rod" ferrules



Details from above rod, note the copper-wire over silk at the guides and female ferrules.

"This rod has been specially designed to stand the heavy strain of work in strong Norwegian rivers. It is a rod of great power, and will fish either fly or spoon. Weight 39 ozs".

"Suitable reel: Alta or 5" Longstone."

"Suitable line: No. 1 Corona" (old designation C5AC or approx. AFTM 13, 42 yards).



HL Leonard 16 foot and 15 foot rods



HLL 15' EH rod, signature wraps



HLL 15' rod, signature wraps



HLL 15' EH rod. Butt double built



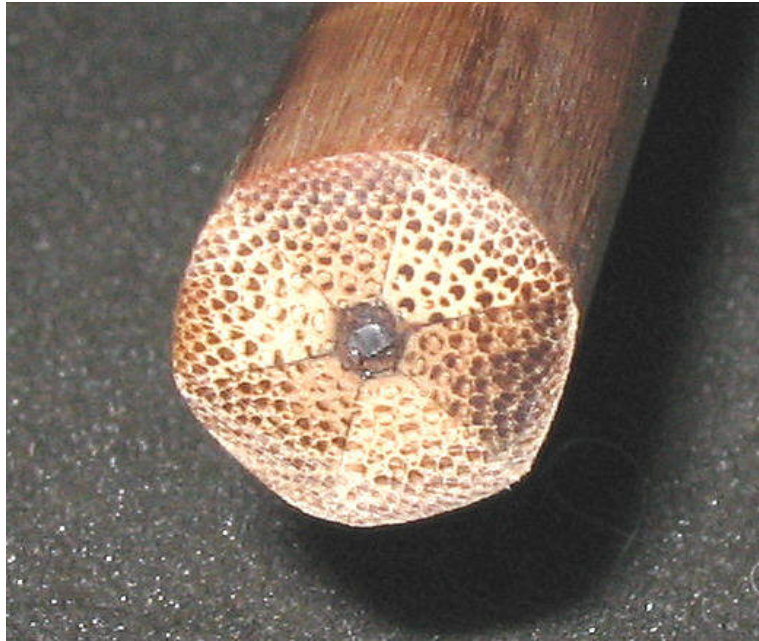
HLL 14' rod. Butt single built



Playfair Grant Vibration 13 foot rod. Butt splice. Note the dramatic swell over the splice.

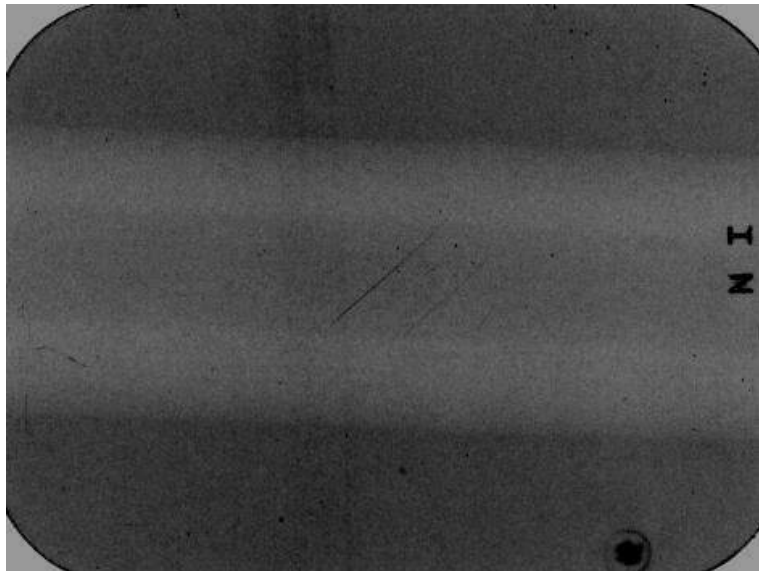


Sharpe's 14 foot rod. Splice faces, double built



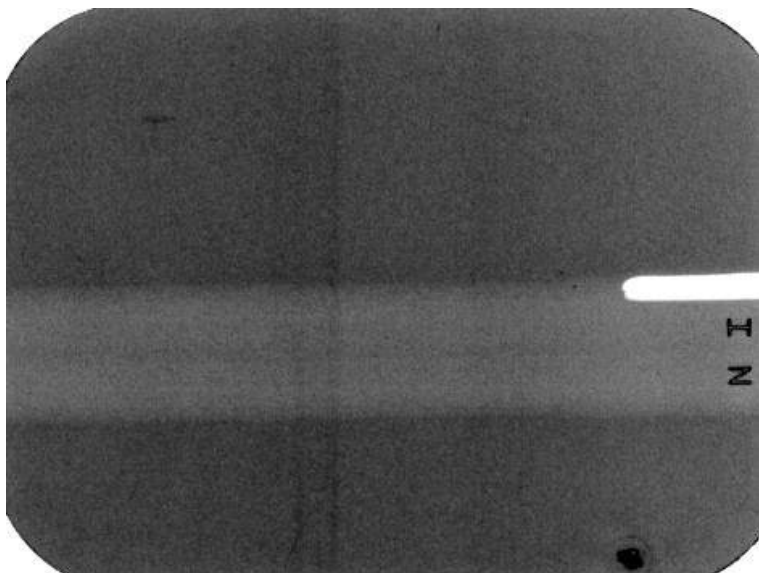
Hardy "Steel Centred" rod, cut just above handle. Rod No. 42029 = 1898

Rod diameter: 11,4 mm = 0,45 in.
Steel center diameter: 1,6 mm = 0,063 in.



X-ray image of Hardy Hollolight 12' 6" Butt piece
The rod is held "corner down".

Diameter app. 12,5 mm = 0,492 in.
Hollow app. 5,0 mm = 0,196 in
Wall app. 3,75 mm = 0,147 in



X-ray image of Hardy Hollolight 12' 6" Top piece

Diameter app. 5,7 mm = 0,223 in



HLL stamp used from 1881-1908



HLL stamp used from 1908-1910 and again from 1925-1964. The stamp was lost in the 1964 fire



In 1910 (or 1927?) the "REG. U.S. PAT. OFF." was added below the stamp

Other stamps were used at different times, the last one introduced in 1982

It is next to impossible to find a supplier for ferrules in dimensions necessary for two-hand rods. Here are a few pictures of how I make them, somewhat abbreviated, from solid stock.



Solid stock
top Ni-Si, bottom Titanium and
Al-Bronze



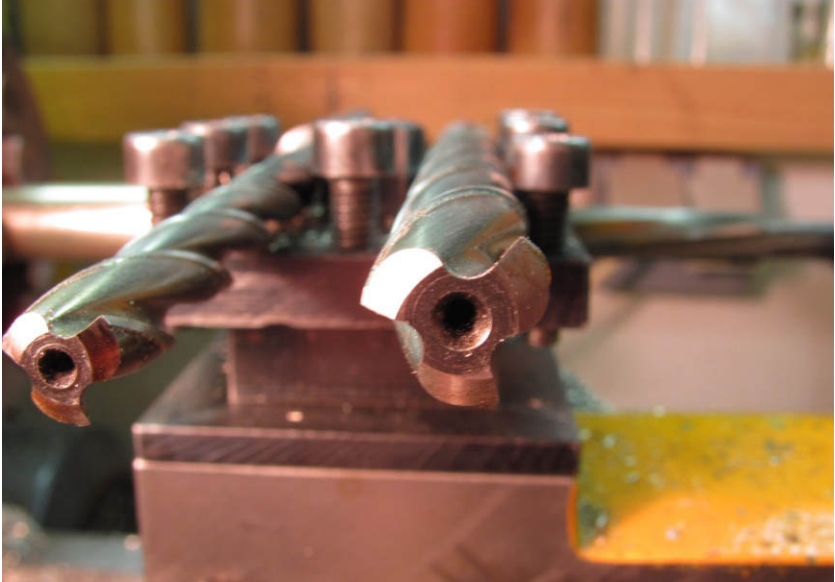
Pieces parted off and centered



Initial holes drilled through.
I use a hard metal drill for the
pilot-hole



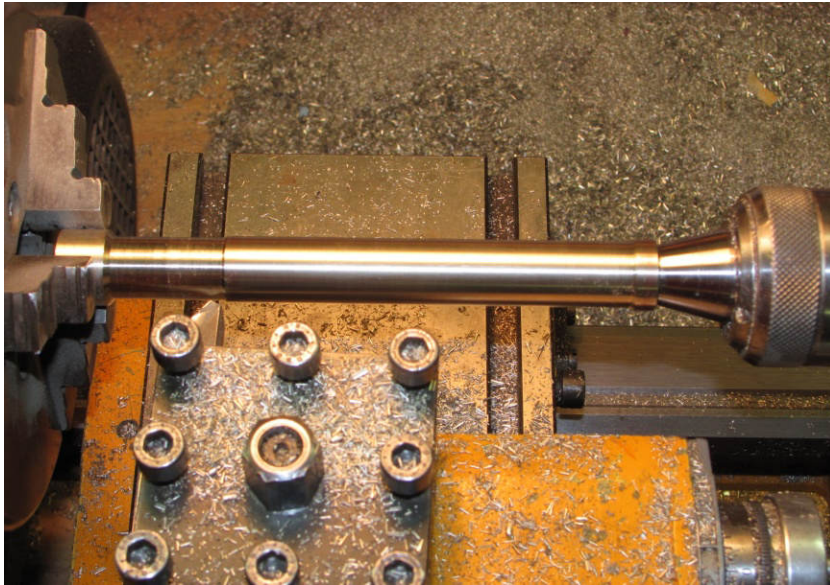
Holes are enlarged...



... using core drills with 3 cutting edges for best centering



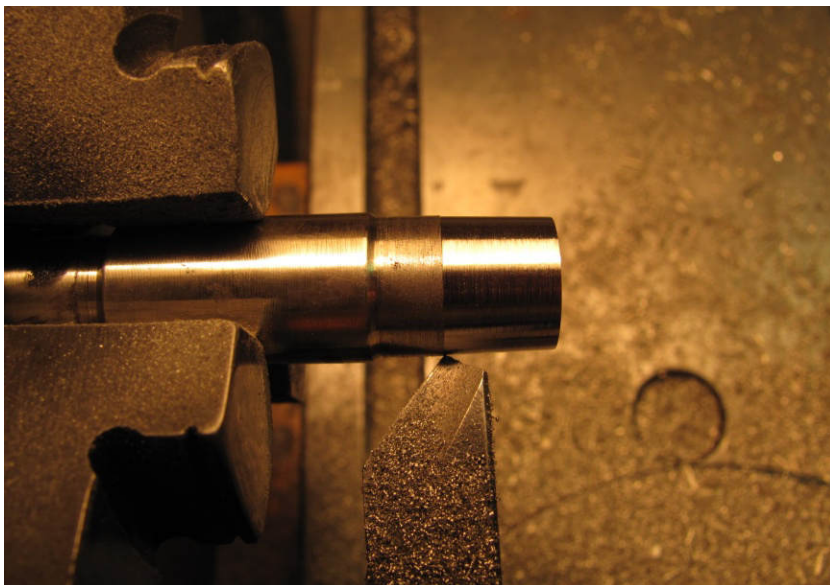
... and females reamed.



The pieces are reversed end-for end and a light cut re-establishes a concentric outside, in case the bore-holes have wandered, then shaped, welt included.

The walls should be thick enough to withstand the forces involved

Leeway (at left) is parted off...



... the ferrule reversed in the chuck and the cone for the serrations is cut



Finished ferrules for 3 rods 3/2 each.

Leeway cut-offs to the right, and a lot of material removed

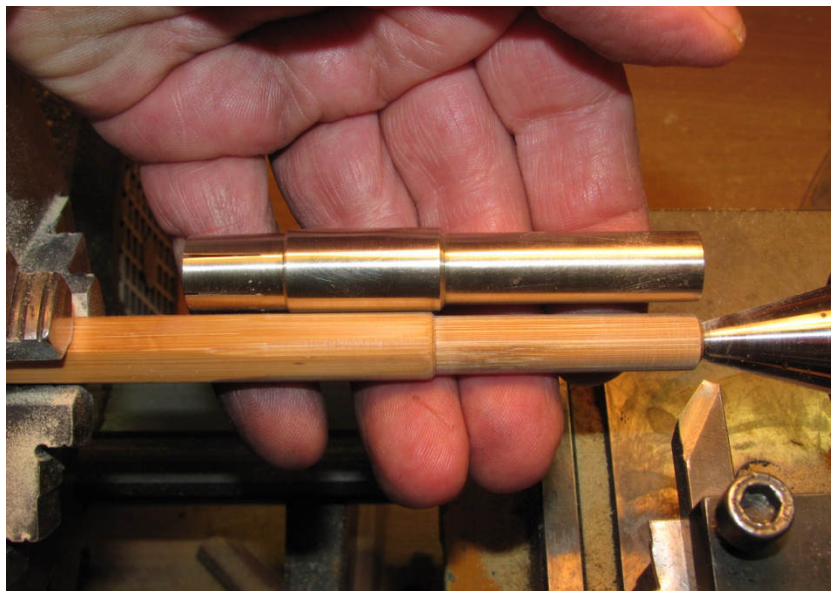
Next is cutting and dressing serrations



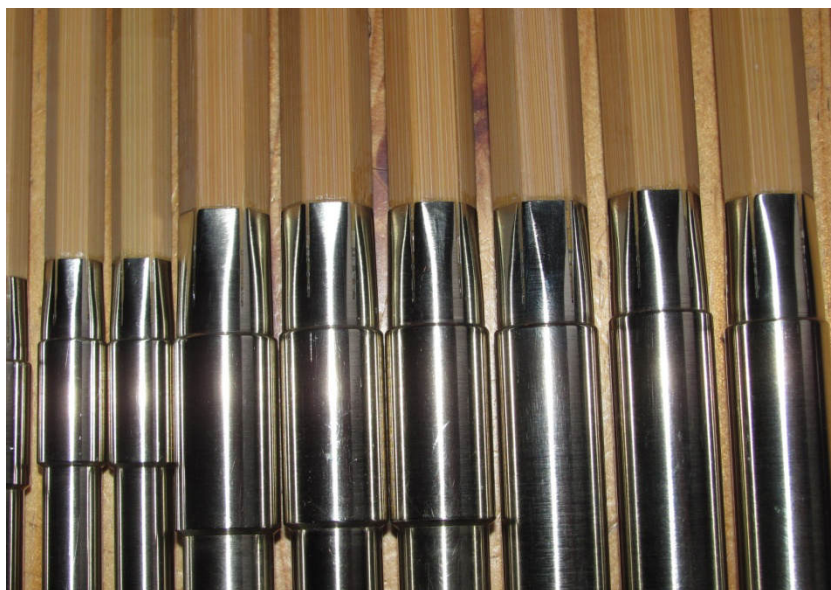
Polished and water-stops are in place, also inside the females

3 females 12 mm ID
3 males 12 mm OD
3 females 8 mm ID
6 males 8 mm OD

(app. 30/64th and 20/64th in.)



Ferrule stations are turned



I press my tabs flat at the ends, to lay smoothly on the bamboo flats



Ferrules glued



Females installed, with ebony-stoppers

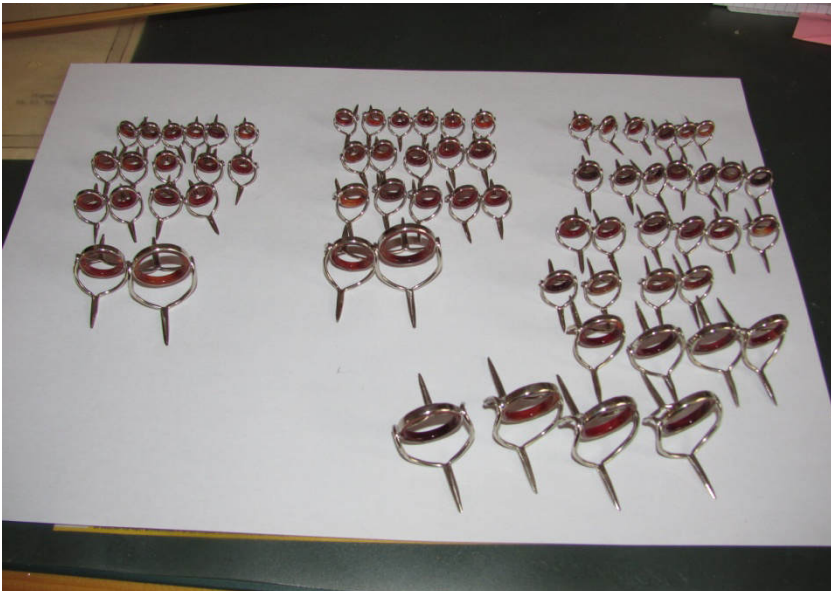


Males installed, on tips, and dressed for a fit.



The finished rods, 12'6" and 13'0", with agate-guides throughout. A total of 57 guides plus 6 agate tip-tops.

A small fortune in guides, but the customers wanted it



Agate guides



Agate tip-tops