ELECTRO-FISHING SURVEY
2004 REPORT

DEVERON
BOGIE
ISLA

CONTENTS

2004 SURVEY REGION	SITE	STREAM	GRID REF:	WIDTH METRES	LENGTH METRES	COND:	SALMON PER M2	TROUT PER M2
UPPER	BW 1	BLACKWATER	332600-824500	2.8	50	118	0.09	0.19
UPPER	BW 9	BLACKWATER	333600-828400	6	30	116	0.09	0.1
UPPER	GOUL 1	GOULLS BURN	341900-834900	1.3	24	120	0	0.19
UPPER	SUC 1	SUCCOTH	342700-835800			115	0	0
UPPER	A7	ALLT DEVERON	338700-824500	2.8	33	118	0.26	0.08
UPPER	Tb4	BURN TREBLE	336300-832900	1.2	25	235	0.38	2.3
MIDDLE	Au 3	AUCHINTOUL	361200-850200	4	46	280	0.03	0.07
MIDDLE	Gd 1	GLENDRONNACH	362500-843000	1.6	34	125	0.07	0.37
MIDDLE	Gd 2	GLENDRONNACH	362600-844000	2.8	28	234	0.38	0.66
MIDDLE	F 12	FORGUE	359700-843600	4.2	46	283	0.44	1.03
LOWER	M 15	MONQUHITTER	381600-852300	2.4	45	282	0.09	0.8
LOWER	T 8	TURRIFF BURN	372900-849400	6	38	307	1.2	0.57
LOWER	Ke 1	KING EDWARD	372300-856300	4.2	30	309	0.15	1.1
LOWER	Fi 10	FISHRIE	375800-857200	3.5	33	285	0.008	0.47
BOGIE	P2	PRIEST WATER	347600-834600	1.65	27	148	0.07	1.1
BOGIE	P 8	PRIEST WATER	349400-834400	2.8	30	133	0.26	1
BOGIE	Lg13	LAG	349000-834300	1.9	26	115	0.13	1.44
BOGIE	Lg 1	LAG	345200-832800	1.5	39	112	0	0.48
BOGIE	Lg 10	LAG	348400-834200	1.5	30	103	0.17	0.13
BOGIE	K10	KIRKNEY	343600-829500	2.7	23	200	0.1	1.13
BOGIE	K39	KIRKNEY	351400-833600	5.6	24	127	0.28	0.27
BOGIE	Til 1	TILLATHROWIE	346800-834700	0.98	30	158	0.07	0.3
BOGIE	Ea 0	EALACHIE	343700-831300	1.6	24	78	0	0.08
BOGIE	Ea 7	EALACHIE	345400-830400	2.7	25	95	0.03	0.55
BOGIE	B 0	BOGIE	348500-824500	3.7	36	175	0.05	0.4
BOGIE	Cow1	COWIE	354700-829700	2.2	30	285	0	0.06
ISLA	CK4	CROOKSMILL	340000-853400	2	30	201	0	0.4
ISLA	CK7	CROOKSMILL	340300-852500	4.5	54	202	0.04	0.5
ISLA	CK11	CROOKSMILL	341400-851300	4.3	30	198	0.26	0.32
ISLA	G 1	GARREL	345300-854900	1.5	22	170	0.45	0.45
ISLA	Am10	AULTMORE	345800-853500	5	48	134	0.18	0.08
ISLA	RUM 1	RUMBUCH	339600-853200	2	30	241	0	0.15
ISLA	C11	CAIRNIE	348100-844800	3	30	140	0.02	0.07

1. OBJECTIVES

The main objectives of the 2004 survey were:

- Monitor areas above obstacle removals & current obstacles
- Monitor areas previously surveyed in 2003
- Survey burns within the catchments affected by the proposed wind farm development.
- Survey burns for Malt Distillers Association/ Spey Research Trust

2. SALMON DENSITIES & PRESENCE/ABSENCE

SECTION OF RIVER	AVERAGE DENSITY	SITES	PRESENCE	ABSENCE
LOWER DEVERON	0.34	4	4	0
MIDDLE DEVERON	0.92	4	4	0
UPPER DEVERON	0.19	6	4	2
ISLA	0.07	7	5	2
BOGIE	0.10	12	9	3

3. TROUT DENSITIES & PRESENCE/ABSENCE

SECTION OF RIVER	AVERAGE DENSITY	SITES	PRESENCE	ABSENCE
LOWER DEVERON	0.74	4	4	0
MIDDLE DEVERON	0.53	4	4	0
UPPER DEVERON	0.47	6	6	0
ISLA	0.29	7	7	0
BOGIE	0. 58	12	12	0

The following sites showed absence of salmon:

Goul 1	Goulls Burn	(Upper Deveron)
Suc 1	Succoth	(Upper Deveron)
CK 4	Crooksmill	(Isla)
R 1	Rumbuch	(Isla)
Lg1	Lag burn	(Bogie)
Ea10	Ealachie	(Bogie)
Cow 1	Cowie	(Bogie)

4. EXPLANATORY NOTES & REMARKS:

- Succoth Burn held no fish It is, however a very steep gradient which probably has very little water in dry summers whilst suffering from very high water during spates and run off from the Clashindarroch. It would possibly sustain a low population of reared fish in a relatively small area. The reason for surveying this burn was in preparation for the proposed Clashindarroch wind farm.
- The Goulls Burn is similar to above but has no natural obstacles and is less steep. It probably holds juvenile salmon lower down closer to the main stem.
- The Crooksmill burn (CK4) site was surveyed on behalf of the Malt Distillers Association to monitor the affects of cooling water returning from distilleries, in this case the Aultmore Distillery which is just outside Keith. The water temperature does not seem to affect the brown trout as all age classes were present. Either the poor spawning of 2003 or the

temporary blockage of the burn lower down at Crooksmill pond during 2003 are the reasons for the absence of salmon. Rock placements to divert water into Crooksmill pond created a blockage for spawning upstream. CK7 & many other burns suggests that spawning in the higher burns was poor in the 2003/4winter.

(This has been mirrored by the Spey Research Trust's electro-fishing survey).

- The Rumbuch Burn was electro-fished to remove all fish to allow the burn to be re-routed for major works on the A96. Sadly no salmon were in evidence and a low number of trout. Being adjacent to the main road, diffuse pollution from gritting may be a cause for poor fish numbers.
- The Lag Burn (Lg 1) is very high up the catchment and above the two Irish fords that were modified in 2001. Given that the low water levels in 2003 had probably affected spawning in the higher parts of the catchment we shouldn't be surprised that no salmon were present in such a small section. This site has been surveyed for the Clashindarroch wind farm monitoring. The Ealachie (Ea0) is not suitable habitat for salmon. Again this has been surveyed for the wind farm project as part of a long term monitoring programme.
- The Cowie Burn (Cow1) was also surveyed on behalf of the Malt Distillers Association. It is a very small burn with no suitable habitat for salmon.
- It is interesting that the only burn in our survey to show any increase in juvenile salmon was the Turriff burn(T8) which is well down the catchment where perhaps the late run of fish were able to spawn. Fry numbers increased from 0.5 per sq:m: to 1.03 per sq: m: suggesting that the late run of fish in October/ November 2003 did not allow for upstream migration before the fish were ready to spawn.
- Significant numbers of minnow were present in T8 and Ck7 which had not been there in previous surveys.
- Perhaps the previous winter has had an effect on the 2+ age class of salmon which do not appear at all in this survey.
- The upper river sites' salmon populations are still declining faster than elsewhere in the catchment and it would appear that a stocking programme should target these areas.

5. DISTRIBUTION OF AGE CLASSES

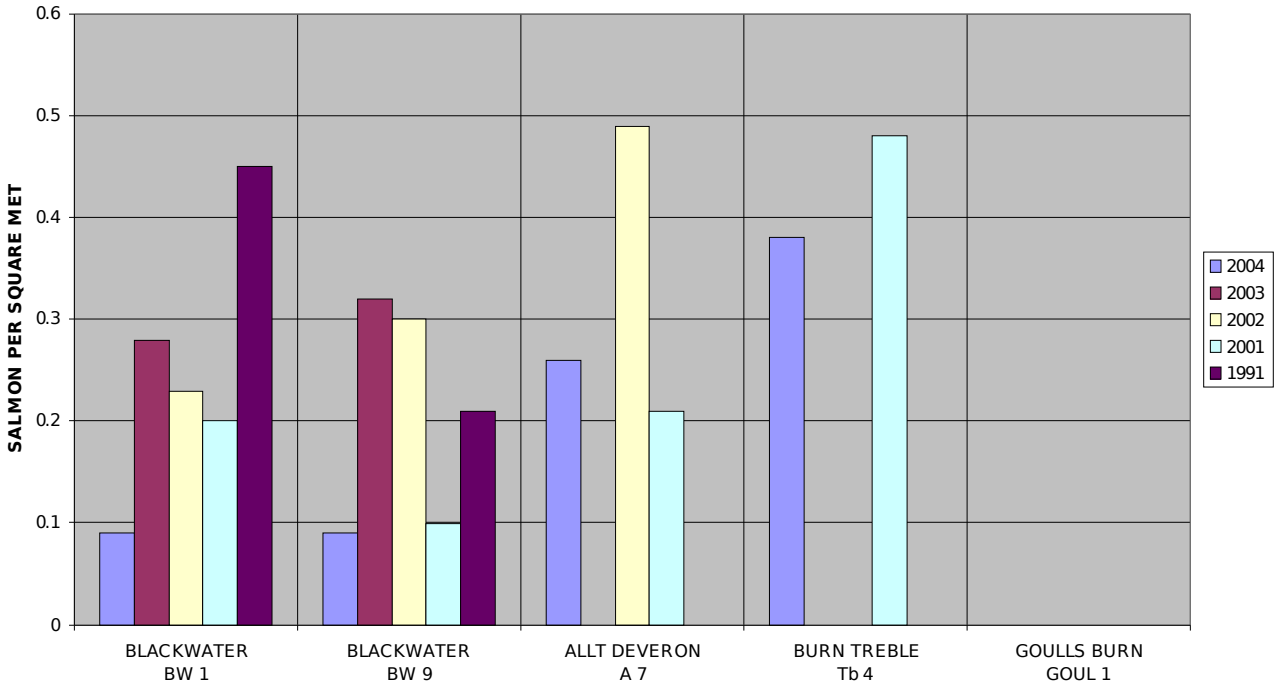
2004 SURVEY

		SALMON AGE CLASSES DENSITITY /SQ: METRE				TROUT AGE CLASSES DENSITITY /SQ: METRE			
SITE	**STREAM**	**0+**	**1+**	**2+**	**3+**	**0+**	**1+**	**2+**	**3+**
BW 1	BLACKWATER	0.02	0.06	0	0	0.16	0.03	0	0
BW 9	BLACKWATER	0.01	0.08	0	0	0.05	0.04	0.01	0.005
A 7	ALLT DEVERON	0.40	0.16	0	0	0.05	0.02	0	0
Tb 4	BURN TREBLE	0.13	0.23	0	0	1.6	0.6	0.03	0.03
GOUL 1	GOULLS BURN	0	0	0	0	0.12	0.06	0	0
Au 3	AUCHINTOUL	0	0.03	0	0	0.005	0.06	0.005	0
Gd 2	GLENDRONNACH	0.03	0.35	0	0	0.27	0.32	0.05	0.02
Gd 1	GLENDRONNACH	0	0.07	0	0	0.06	0.28	0.02	0.02
F 12	FORGUE	0.19	0.24	0	0	0.82	0.2	0.005	0
M 15	MONQUHITTER	0.03	0.06	0	0	0.7	0.13	0.019	0
KE 1	KING EDWARD	0	0.14	0	0	0.91	0.16	0.01	0.008
T 8	TURRIFF BURN	1.06	0.13	0	0	0.54	0.009	0.03	0
Fi 10	FISHRIE	0	0.008	0	0	0.33	0.09	0.03	0.008
P2	PRIEST WATER	0.02	0.05	0	0	0.93	0.07	0.07	0
P 8	PRIEST WATER	0.01	0.25	0	0	0.85	0.14	0.01	0
Lg13	LAG	0	0.13	0	0	1.19	0.21	0.04	0
Lg 1	LAG	0	0	0	0	0.05	0.37	0.05	0
Lg 10	LAG	0	0.17	0	0	0.13	0	0	0
K10	KIRKNEY	0	0.10	0	0	0.66	0.32	0.11	0.03
K28	KIRKNEY	0.17	0.11	0	0	0.21	0.05	0	0
K39	BOGIE	0	0.05	0	0	0.35	0.05	0.007	0
B 0	TILLATHROWIE	0	0.07	0	0	0	0.27	0.03	0
Til 1	EALACHIE	0	0	0	0	0	0.08	0	0
Ea 0	EALACHIE	0	0.03	0	0	0.53	0.015	0	0
Ea 7	COWIE	0	0	0	0	0.05	0	0	0
CK 4	CROOKSMILL	0	0	0	0	0.26	0.16	0	0
CK7	CROOKSMILL	0	0.04	0	0	0.43	0.06	0.004	0
CK 11	CROOKSMILL	0.19	0.07	0.008	0	0.29	0	0.03	0
Am 10	AULTMORE	0.14	0.04	0	0	0.06	0	0.02	0
G 1	GARREL	0	0.02	0	0	0.52	0.008	0	0
C 11	CAIRNIE	0	0.02	0	0	0.04	0.01	0.01	0
RUM 1	RUMBUCH	0	0	0	0	0.08	0.07	0	0

7 .UPPER DEVERON SITES

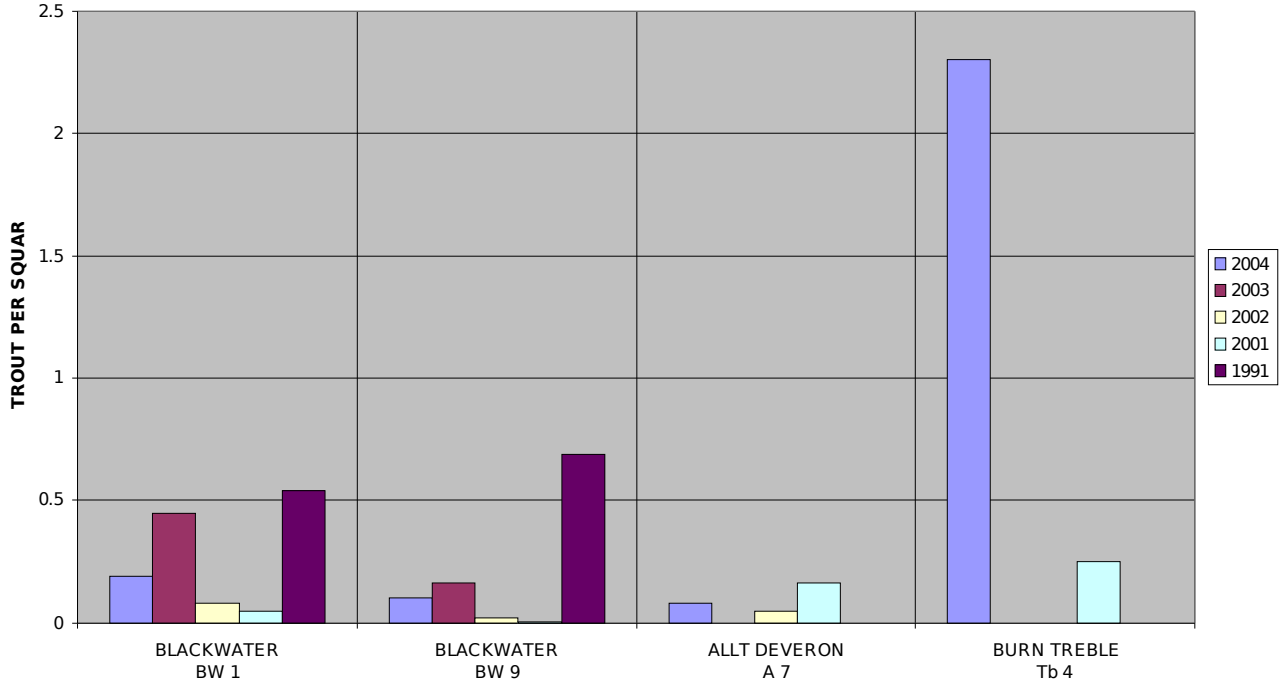
SALMON

UPPER DEVERON SITES 1991- 2004

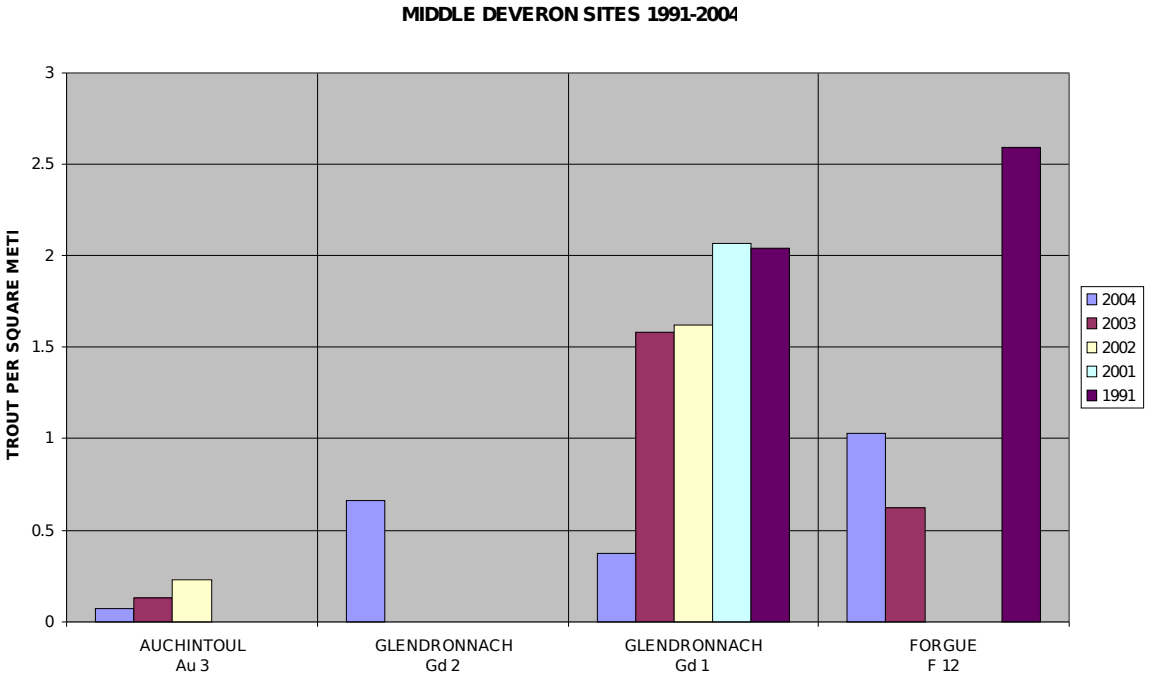


TROUT

UPPER DEVERON SITES 1991- 2004



8. MIDDLE DEVERON SITES
SALMON



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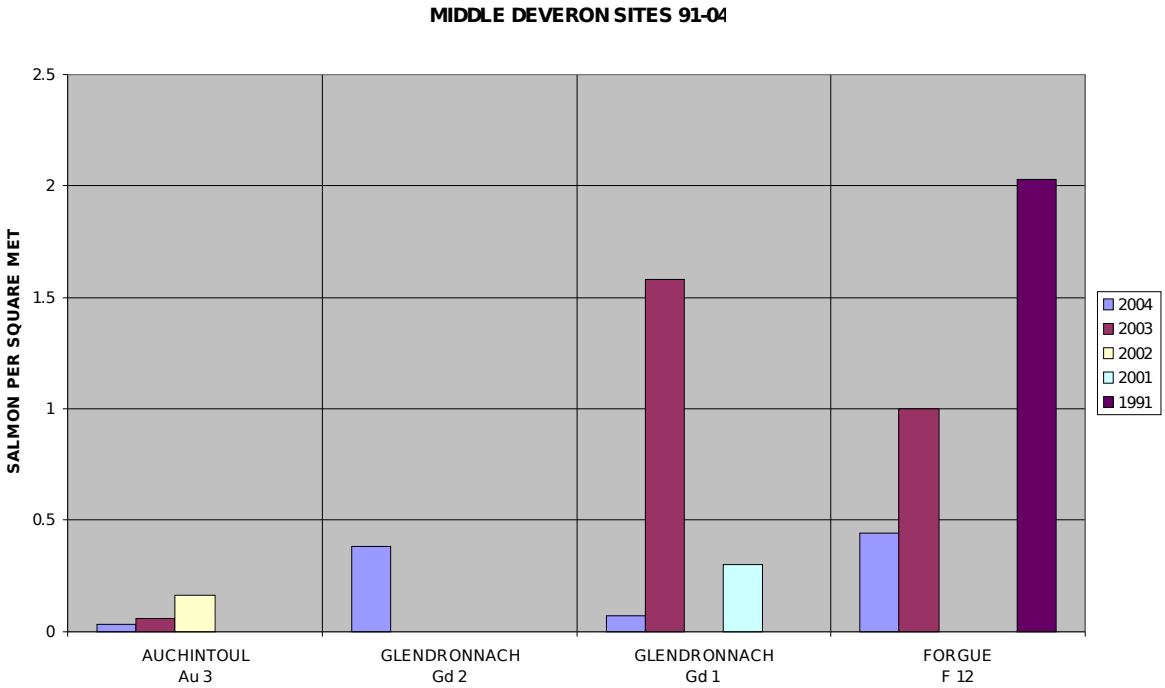
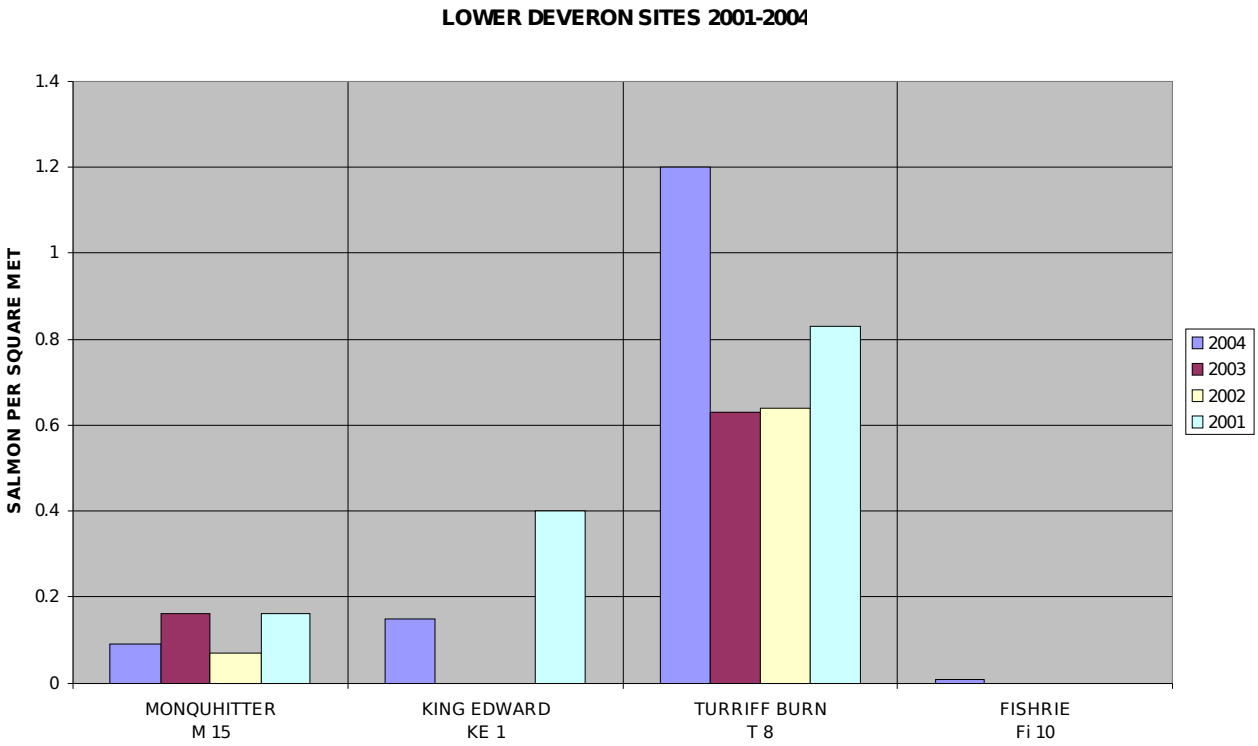


9. LOWER DEVERON SITES

SALMON



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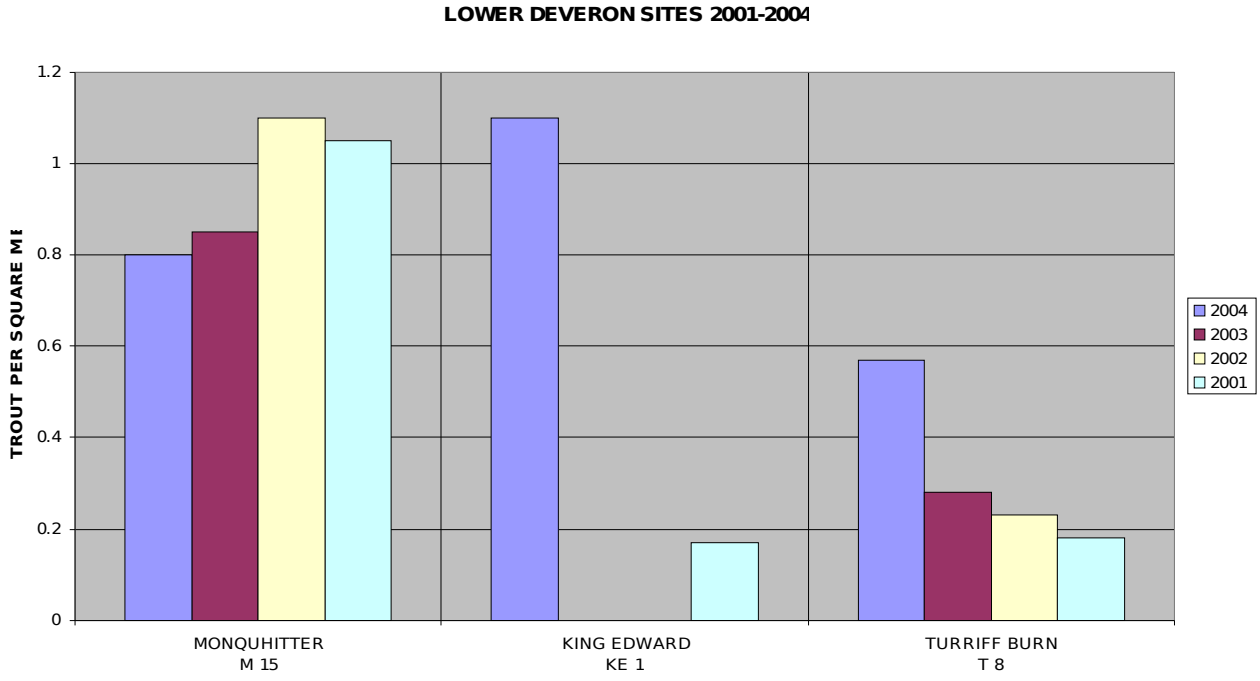
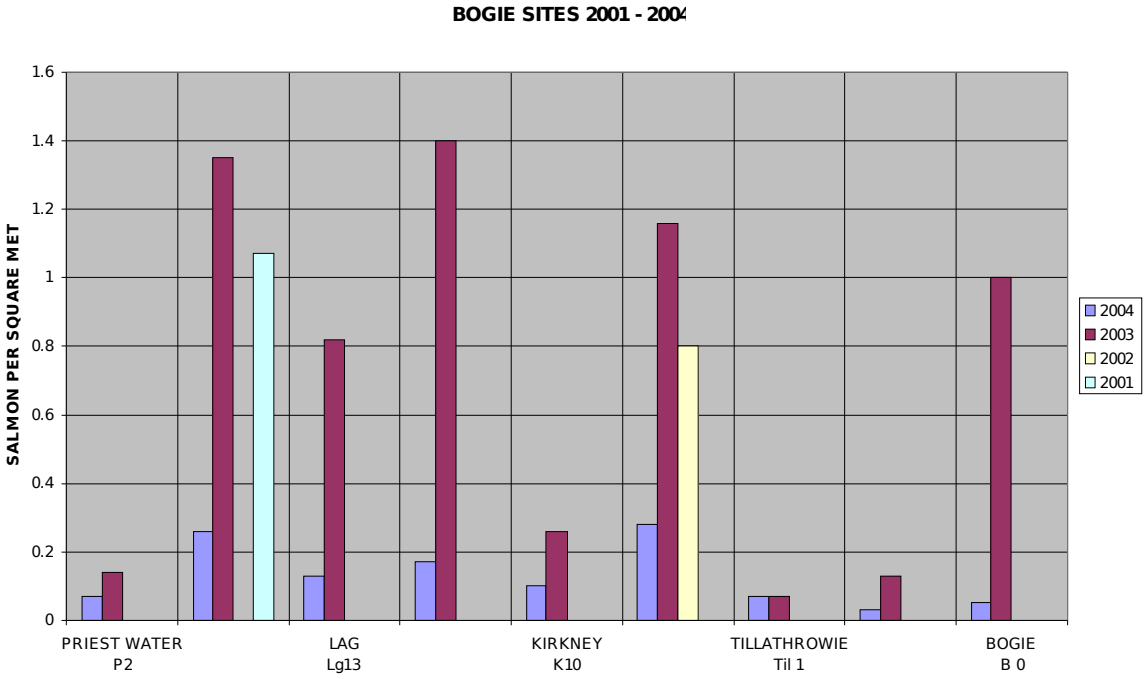


10. BOGIE SITES

SALMON



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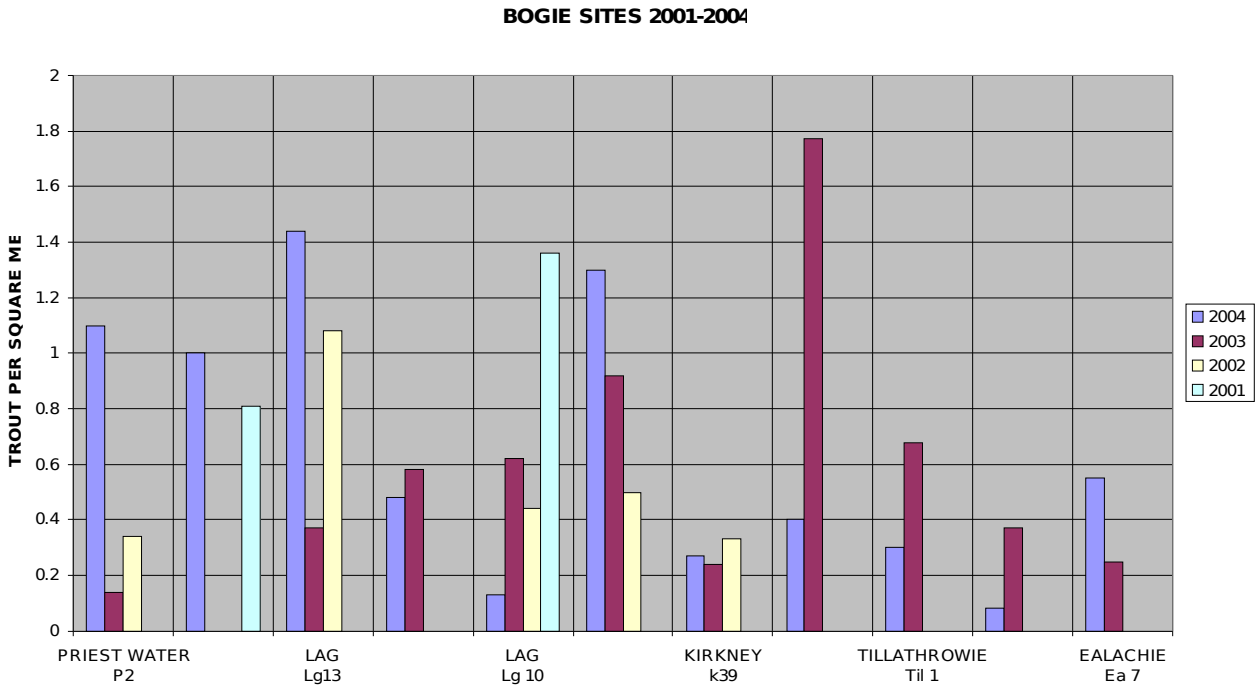
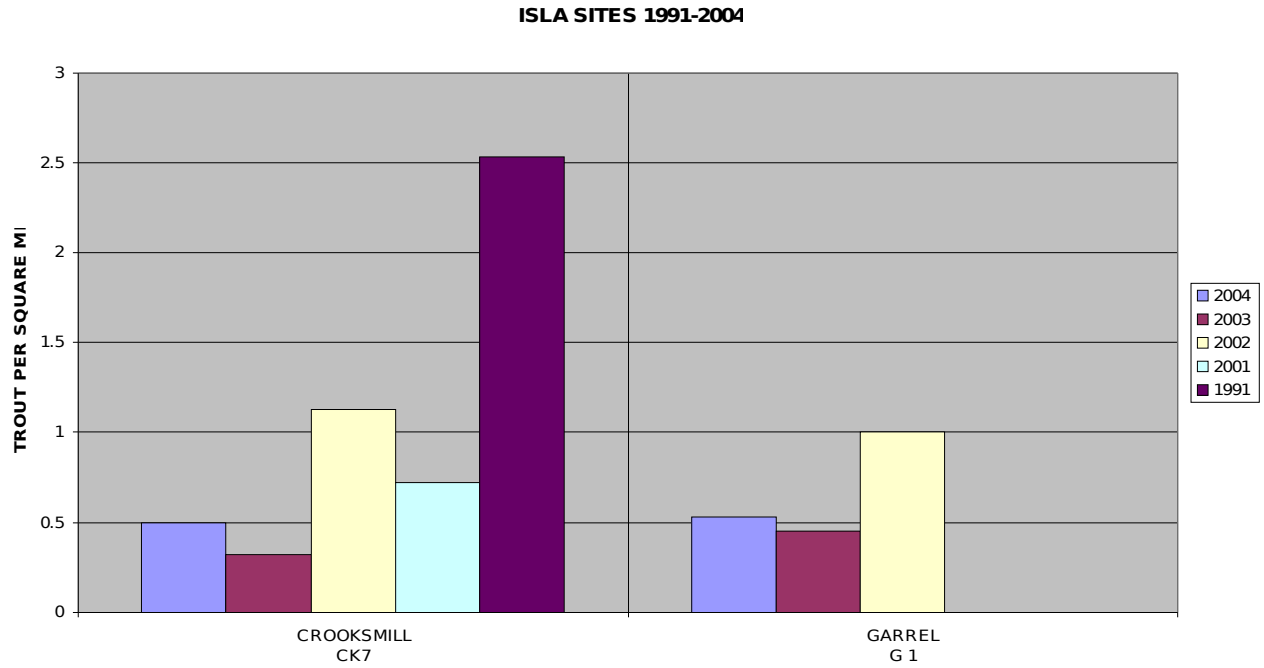


11. ISLA SITES

SALMON



TROUT