

- 1) Why BKT don't do well in some streams and do in others
i.e. Habitat, Gradient etc....
- 2) Spawning
- 3) Stuckal areas, why no successful ship in some and some success in others.
(Angling impacts)
- 4)

BROOK TROUT POPULATIONS SAMPLED IN GREAT SMOKY MOUNTAINS
NATIONAL PARK, 1989 - 1983,
AND THEIR STATUS AS DETERMINED BY PROTEIN ELECTROPHORESIS

<u>Code</u>	<u>Stream</u>	<u>Type</u>	<u>Date</u>	<u>Sample</u>	<u>% CK-A2*</u> <u>78 allele</u>
ADN	Aden Creek ✓	(N)	1993	10	3580
AND	Andy Branch ✓	(N)		10	3200
BCC	Balsam Corner Creek ✓	(H ¹)		10	0 3400
BCK	Beech Creek ✓	(N)		10	3380
BFP	Beech Flats Prong ✓	H	1989 1992	25 20	20% 13% 3720
BGC	Big Creek ✓	N	1993	5	3200
BUF	Buck Fork ✓	N	1989	25	
BUN	Bunches Creek ✓	(N)	1989 1991 1992 1993	25 4 10 25	4750
CCR	Cooks Creek	(N)		10	3680
CHC	Camel Hump Creek	N		10	2800
CHS	Chasteen Creek	(H)		10	5%
CON	Conrad Branch	(N)		10	3100
COR	Correll Branch	(N)		10	2900
DEF	Defeat Creek	(N)	1993	10	2800
DSC	Desolation Creek	(N)	1993	10	2920
DUN	Dunn Creek	H	1992 1992	10 24	20% 33% 3200
ENL	Enloe Creek	(N)	1992	10	3700
ERP	Eagle Rocks Prong	N	1989	6	
FLC	Flat Creek	(N)	1989 1991	25 4	4840
GFK	Gunter Fork	(H)	1993	10	10% 3100

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HAZ	Hazel Creek	(N)	1993	10	3940
HUG	Huggins Creek	(N)	1993	10	4000
HYC	Hyatt Creek	(H)	1989	25	44%
			1991	28	7%
			1992	10	20%-
			1993	23	9%
ICC	Indian Camp Creek	N	1992	10	0 3040
			1992	30	0
IFB	Indian Flats Branch	H	1993	10	35% 3000
JBC	Jack Bradley Creek	(N)	1993	10	3240
KEE	Keeyuga Creek	(N)	1993	10	4000
KNF	Kanati Fork	(N)	1993	10	2900
LBC	Lost Bottom creek	(N)		10	3320
LCP	Lynn Camp Prong	N	1993	10	3740
LDG	Ledge Creek	(H)	1989	25	22%
			1991	20	42%
MAR	Marks Creek	N	1992	10	2680
MEG	Meigs Creek	HD	1989	12	100%
			1991	18	100%
			1992	11	100%
			1993	10	100%
MEP	Meigs Post Creek	N		10	3800
MGB	McGinty Branch	(H)	1993	10	0 4100
MLP	Middle Prong, LPR		1993	10	3120
PBR	Peruvian Branch	(H)	1993	10	10% 3780
PHC	Pretty Hollow Creek	(N)		10	3600
PRC	Proctor Creek	(N)	1993	10	3200
RAV	Raven Fork	(N)	1992	10	3780

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RCR	Rock Creek	H	1993	10	25%
			1993	16	13%
RGH	Rough Fork	N	1993	10	3440
RPG	Road Prong	N		10	3960
SAM	Sams Creek	N	1991	13	3340
SIL	Silers Creek	N	1991	4	
			1992	10	
			1992	25	3440
STF/SFC	Straight Fork	H	1992	8	13%
				10	0
STK	Starkey Creek	N	1989	25	
			1991	12	
STL	Steel Trap Creek	N	1993	10	3810
SWE	Sweet Creek	N		10	3800
TAY	Taywa Creek	H	1992	25	45%
			1992	10	45%
			1992	32	50%
			1993	4	
WAC	Walker ^{CK} Branch	N	1993	10	3580
WDY	Woody Creek	H	1993	7	14% 3780

Notes:

N = Native, H = Hybrid, HD = Hatchery Derived (Meigs Creek)

¹ Samples with no CK-A2* 70 alleles, but with alternative hatchery alleles at other loci

Summary:

58 populations sampled: 35 native - ~~67.80%~~ 68.62 %
 12 hybrid by CK-A2* diagnostic locus } ~~Native~~ 29.41 %
 3 hybrid by other loci
 1 hatchery derived (Meigs Creek) - ~~Native~~ 1.96 %