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INSTITUTE FOR FISHERIES RESEARCH
DIVISION OF FISHERIES
MICHIGAN DEPARTMENT OF CONSERVATION
COOPERATING WITH THE
UNIVERSITY OF MICHIGAN

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EXPERIMENT ON TAGGING METHODS

(Preliminary statement)

Pursuant to discussions and arrangements previously made, the Institute undertook in September 1931 the tagging of a large number of trout at the Harrietta Hatchery, to determine what method of tagging is least likely to induce loss of fish, or the dropping of the tags.

The tagging was done by Dr. John Greeley and Mr. Gerald McCrimmon, of the Institute staff.

In this "preliminary statement" a list is given of the fish tagged by each method. Two series of experiments were begun, one of eight, the other of three experiments, as follows:

Experiment	Date	Age of fish	Position of tags	Pages
A-1	Sept. 11-12	Yearlings	Small tag on left gill cover; large tag on right	2-4
A-2	Sept. 12	Yearlings	Large tag on left gill cover.	5-7
A-3	Sept. 12		Small tag on left gill cover.	8-10
A-4	Sept. 12-14	Yearlings	Small tags in subopercle.	11-13
A-5	Sept. 14	Yearlings	Large tag between sub and pre opercle	14-15
A-6	Sept. 14	Yearlings	Small tag on base of tail. On top.	16
A-7	Sept. 15	Yearlings	Small tag on base of tail. On bottom	17
A-8	Sept. 15	Yearlings	Small tag on Dorsal Fin.	18
B-1	Sept. 15-18	Fingerlings	Small tag on right gill cover	19-29
B-2		Fingerlings	Right gill cover.	30-31
B-3		Fingerlings	Right gill cover.	32-33

EXPERIMENT A-1

Harrietta Hatchery, Sept. 11, 1931

Yearlings, Small tag on Left Gill Cover,

Large tag on right.

Small Tag No.	Large Tag No.	Size	Sex
15101	12804	7 "	F.
15102	12806	8"	F.
15103	12807	7 1/2"	F.
15104	12808	8"	M.
15105	12809	7 1/8"	M.
15106	12810	7 1/2"	F.
15107	12811	8"	M.
15108	12812	8 1/2"	M.
15109	12813	7"	F. One gill a little short on Right side.
15110	12814	8 1/2"	M.
15111	12815	7 1/2"	F. Right gill cover a little short.
15112	12816	7"	M.
15113	12817	7 1/4"	F.
15114	12818	9"	F.
15116	12819	8 1/2"	F.
15117	12821	7 1/4"	M.
15118	12822	7 3/4"	M.
15120	12823	7 1/4"	F.
15121	12824	9 1/4"	M.
15122	12825	7 3/4"	F.
15124	12826	7 1/4"	M.
15125	12827	7 1/4"	F. Tag came out
15126	12828	8 1/4"	M.
15127	12829	6 1/2"	F.
15128	12830	7 3/4"	M.
15129	12831	7"	M.
15130	12832	7 3/4"	M.
15131	12833	7 1/4"	F.
15132	12834	7 3/4"	F.
15133	12835	7 3/4"	M.
15134	12837	7 3/4"	M.
15135	12838	6 3/4"	F. Bad gills.
15136	12839	6 3/4"	F.
15137	12841	6 1/2"	F.
15138	12842	6 3/4"	F.
15139	12843	7"	F.
15140	12844	7 3/4"	M.
15141	12845	7 3/4"	M.
15142	12846	6 3/4"	F.
15143	12847	7 1/4"	F.

EXPERIMENT A-1

(Con.)

Small Tag No.	Large Tag No.	Size	Sex
15144	12848	6 7/8"	F
15145	12849	7 5/8"	M
15147	12850	8 1/4"	M
15148	12851	7 1/8"	F
15149	12852	7 1/2"	F
15150	12853	7 3/8"	M
15151	12854	6 3/4"	F
15152	12856	8"	M
15153	12857	7 5/8"	M
15154	12858	7 5/8"	M
15155	12860	6 7/8"	F
15156	12861	7"	M
15157	12862	6 5/8"	F
15158	12863	7 1/8"	M
15159	12864	7 5/8"	F
15160	12866	6 5/8"	F
15161	12867	8 7/8"	M
15162	12869	7 1/4"	F
15163	12870	8 1/4"	F
15164	12871	8"	M
15165	12872	7 1/8"	F
15166	12873	7 3/4"	M
15167	12874	7 7/8"	F Gill Bad
15168	12875	8"	F
15169	12876	7 1/8"	F
15170	12877	6 1/2"	F
15171	12878	7 5/8"	M

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15172	12879	8"	M
15173	12882	7 1/2"	F
15174	12883	7 1/4"	F
15175	12884	6 7/8"	F
15176	12885	6 5/8"	F
15177	12886	6 3/4"	F
15178	12887	7 1/2"	M
15179	12888	7 1/8"	M
15180	12889	7 1/4"	M
15181	12890	6 1/2"	F
15182	12891	7 5/8"	M
15183	12892	7 7/8"	M Bad Gills
15184	12893	8 1/4"	M
15185	12894	8"	M
15186	12895	7 1/8"	F

EXPERIMENT A-1

(Con.)

Small Tag No.	Large Tag No.	Size	Sex
15187	12896	7"	M
15188	12897	6 1/4"	F
15189	12898	6 1/4"	F
15190	12899	8 1/4"	M
15191	12900	6 7/8"	M
15192	12901	6"	F
15193	12902	6 1/2"	F
15194	12903	8 1/4"	F
15195	12904	6 7/8"	F
15196	12905	7"	M
15197	12906	6 1/2"	F
15198	12907	6 1/2"	F
15199	12908	7 3/8"	F
15200	12909	8"	M
15201	12910	7 5/8"	F
15202	12911	7 1/4"	M
15203	12912	7 3/4"	M
15204	12913	7 1/8"	M

EXPERIMENT A-2

Harrietta Hatchery, Sept. 12, 1931. Large tag on yearlings

Left Gill cover.

Tag No.	Length	Sex	
12914	6 5/8"	M	
12915	6 1/2"	F	
12916	6 1/2"	F	
12917	7 1/4"	M	
12918	7 1/2"	F	
12919	6 3/4"	F	
12920	6 3/4"	M	
12921	8 3/4"	M	
12922	7 3/4"	F	
12924	8 1/2"	M	
12925	9 1/8"	M	Gill torn a little by tagging
12926	8"	F	
12927	8"	M	
12928	6 3/8"	M	
12929	8 3/4"	M	
12930	9"	M	
12931	8"	M	
12932	8 7/8"	M	
12933	7"	M	
12935 and 12934		Tags ruined
12936	6 1/4"	F	
12937	6"	F	
12938	7 1/2"	F	
12939	7 1/4"	F	
12940	6 1/2"	F	
12941	6 3/8"	F	
12942	6"	F	
12943	6 5/8"	F	
12944	7 1/4"	M	
12945	6 1/4"	M	
12946	6 1/8"	F	
12947	6 3/8"	F	
12948	6 3/8"	F	
12949	7 3/8"	F	
12950	7"	F	
12951	6 5/8"	F	
12952	6 7/8"	M	
12953	7 1/2"	M	
12954		Ruined
12955	8"	M	
12956	8"	M	
12957	7 5/8"	M	
12958	7 3/4"	M	
12959	8 1/4"	M	
12960	7 1/2"	M	
12961	7 1/4"	F	

EXPERIMENT A-2

(Con.)

Tag No.	Length	Sex
12962	6 7/8"	M
12963	7 1/2"	M
12964	7 3/4"	F
12965	7 1/2"	M
12966	8"	M
12967	6 1/2"	F
12968	6 5/8"	F
12969	7"	F
12970	8"	M
12971	7 3/4"	M
12972	7 1/4"	F
12973	8 3/4"	M
12974	7"	F
12975	6 3/4"	M
12976	6 3/4"	F
12977	8 1/4"	M
12978	7 1/8"	F
12979	6 3/8"	F
12980	7 5/8"	M
12981	7 1/4"	F
12982	7 3/8"	F
12983	8 1/2"	M
12984	6 3/4"	M
12985	6 7/8"	F
12986	7 1/8"	F
12987	6 1/2"	F
12988	7 1/2"	M
12989	6 1/2"	F
12990	7"	M
12991	6 1/2"	F
12992	7 1/8"	F
12993	6 1/2"	M
12994	6 7/8"	F
12995	6"	F
12996	7 3/8"	F
12997	7 1/8"	F
12998	7 1/4"	F
12999	6 3/8"	M
13000	7 3/8"	F
13001	6 3/4"	M
13002	7 5/8"	M
13003	8 7/8"	M
13004	7 1/8"	M
13005	7 1/8"	F
13006	9"	M
13007	8 1/8"	M
13008	8 3/8"	M

EXPERIMENT A-2

(Con.)

Tag No.	Length	Sex
13009	7 1/8"	M
13010	6 3/4"	F
13011	7 5/8"	M
13012	8"	M
13013	7 1/8"	M
13014	6 5/8"	F
13015	6 5/8"	F
13016	7 3/8"	M
13017	6 5/8"	M

EXPERIMENT A-3

Brook Trout. Small Tag on left Gill Cover. Harrietta Hatchery, Sept. 12, 1931.

Tag No.	Size	Sex
15205	8 1/2"	M
15206	8 1/2"	M
15207	7 3/4"	M
15208	6 3/4"	F
15209	9 1/8"	M
15210	6 3/4"	F
15211	7 5/8"	M
15212	7 1/8"	F
15213	6 3/4"	M
15214	6 1/8"	F
15215	6 1/2"	F
15216	8 7/8"	M
15217	7 5/8"	F
15218	7 5/8"	M
15219	7"	F
15220	8 1/8"	M
15221	7 3/4"	M
15222	7 3/4"	F
15223	8 7/8"	M
15224	8 5/8"	M
15225	7"	F
15226	7 1/2"	M
15227	7 3/8"	F
15228	7 3/4"	F
15229	8 3/8"	M
15230	7"	F
15231	7 3/8"	M
15232	7 7/8"	F
15233	7"	F
15234	7 1/8"	F
15235	7 1/8"	M
15236	7 1/8"	F
15237	7 1/8"	F
15238	7 1/8"	F
15239	7 1/4"	F
15240	7 1/4"	F
15241	8"	M
15242	7"	M
15243	6 1/2"	M
15244	7"	F
15245	6 1/4"	F
15246	6 3/4"	M
15247	8"	F
15248	8 3/8"	F
15249	6 1/4"	F
15250	6 1/2"	F

EXPERIMENT A-3

(Con.)

Tag No.	Size	Sex
15251	6 1/2"	F
15252	6 1/2"	F
15253	7"	F
15254	6 1/4"	F
15255	6 1/4"	F
15256	7"	F
15257	6 5/8"	F
15258	7 5/8"	F
15259	6 5/8"	F
15260	6 3/4"	F
15261	7 1/2"	M
15262	6 1/2"	M
15263	7"	M
15264	7 7/8"	F
15265	7 1/4"	F
15266	7 3/4"	M
15267	6 3/4"	F
15268	7"	F
15269	7 1/4"	M
15270	6 1/2"	F
15272	6 3/8"	F
15273	6 3/4"	F
15274	6 1/8"	F
15275	7 3/4"	M
15276	7 3/4"	F
15277	6 1/2"	F
15278	7 3/4"	M
15279	8 1/2"	F
15280	7 3/4"	F
15281	8 5/8"	M
15282	7 5/8"	M
15283	7 3/8"	M
15284	7 3/8"	M
15285	7 1/8"	M
15286	6 3/4"	F
15287	8 1/2"	M
15288	8 5/8"	M
15289	8 5/8"	M
15290	7 3/4"	M
15291	8"	M
15292	9"	M
15293	8"	M
15294	6 7/8"	M
15295	8"	F
15296	8 3/8"	F
15299	6 3/4"	M
15300	7 7/8"	F
15301	7 1/8"	F

Gills Bad

EXPERIMENT A-3

(Con.)

Tag No.	Size	Sex
15302	7 1/8"	M
15303	7 1/4"	M
15304	7 1/4"	F
15305	7 3/4"	M
15306	7 1/2"	F
15307	8 1/4"	M

EXPERIMENT A-4

Harrietta Hatchery, Sept. 12, 1931. Yearling with small tags in
Subopercle.

Tag No.	Size	Sex	
15308	7 1/4"	M	
15309	7 1/8"	M	
15310	7"	F	
15311	7 1/8"	F	
15312	6 7/8"	M	
15313	6 3/4"	F	
15314	6 1/4"	F	Gill torn some.
15315	6 3/8"	F	
15316	6 5/8"	F	
15317	7 5/8"	F	
15318	7 5/8"	M	
15319	7"	F	
15321	7 5/8"	M	
15322	8 1/4"	M	
15323	8 1/2"	M	
15324	7 5/8"	M	
15325	8 1/2"	F	
15326	7"	F	
15327	6 3/8"	F	
15328	8 1/8"	F	
15329	8"	F	
15330	7 1/8"	F	
15331	7 3/4"	M	
15332	7 1/2"	F	
15333	7 1/8"	F	
15334	7 1/2"	F	
15335	6 1/2"	F	
15336	6 3/4"	F	
15337	7"	M	
15338	6"	M	
15339	8"	M	
15340	7 1/2"	F	
15341	7"	M	
15342	7 1/4"	F	
15343	7 5/8"	M	
15344	6 3/4"	F	
15345	7 1/4"	F	
15346	7 1/4"	F	
15347	6 7/8"	F	
15348	6 7/8"	M	
15350	9"	M	
15351	6 1/8"	F	
15352	6 1/8"	M	
15353	6 1/2"	F	
15354	6"	M	
15355	7"	F	

EXPERIMENT A-4

(Con.)

Tag No.	Size	Sex
<u>Sept. 14, 1931</u>		
15356	7 3/4"	F
15357	8 1/2"	F
15358	6 3/8"	M
15359	7 1/2"	M
15360	8"	M
15361	7 3/4"	M
15362	7"	M
15363	7 3/4"	M
15364	6 3/4"	F
15365	6 1/2"	M
15366	6 3/4"	M
15367	7 3/4"	F
15368	7"	M
15369	7 3/4"	F
15370	7"	F
15371	7"	M
15372	7"	F
15373	7 1/2"	M
15374	8"	M
15375	7"	M
15376	7"	M
15377	7"	M
15378	8 1/4"	M
15379	7 1/2"	F
15380	7 1/2"	F
15381	7 1/4"	M
15382	8 1/2"	M
15383	7"	M
15384	7 1/8"	M
15385	6 5/8"	M
15386	6 1/4"	F
15387	6 1/2"	F
15388	8 7/8"	M
15389	7 1/2"	F
15390	6 1/4"	M
15391	6 1/8"	M
15392	7 1/4"	M
15393	6 3/4"	F
15394	7"	M
15395	8 1/4"	M
15396	7"	F
15397	7"	F
15398	6 1/8"	F
15399	7"	M
15400	7 1/8"	M
15402	7 1/4"	M
15403	7 3/8"	F
15404	6 1/8"	F

EXPERIMENT A-4

(Con.)

Tag No.	Size	Sex
15405	7"	M
15406	7 1/2"	M
15407	6 1/2"	F
15408	7 5/8"	M
15409	6 1/4"	M
15411	6 7/8"	F

EXPERIMENT A-5

Harrietta Hatchery, Sept. 14, 1931. Brook trout yearling with large tag between Sub and Pre opercle.

Tag No.	Size	Sex
13018	7 1/2"	M
13019	7 1/2"	F
13020	7 3/8"	M
13021	8 1/4"	M
13023	7 1/8"	M
13024	6 1/2"	F
13025	8 1/2"	M
13026	8 3/4"	M
13027	7 1/4"	M
13028	7"	F
13029	9 1/4"	M
13030	9 1/4"	M
13031	9 1/4"	M
13032	7"	F
13033	7 5/8"	F
13034	6"	F
13035	8 1/4"	M
13036	8 5/8"	F
13037	8"	M
13038	7 1/4"	M
13039	6 3/4"	M
13041	7"	M
13042	8"	M
13043	6 3/4"	F
13044	6 1/2"	F
13045	7"	F
13046	6 5/8"	M
13047	6 3/8"	M
13048	7 3/4"	M
13049	7 5/8"	F
13050	6 5/8"	M
13051	6 1/4"	F
13052	7"	F
13053	7"	M
13054	7 1/2"	F
13055	7 1/4"	F
13056	7"	F
13057	7 3/8"	F
13059	6 1/2"	M
13060	7"	M
13061	8 1/4"	F
13062	7 1/2"	F
13063	7 5/8"	M
13064	7 3/4"	F
13065	7 1/4"	F
13066	6 1/2"	F
13067	6 1/4"	M
13068	6 7/8"	F

EXPERIMENT A-5

(Con.)

Tag No.	Size	Sex
13069	7 1/4"	F
13070	8 1/4"	M
13071	6 5/8"	F
13072	7 7/8"	M
13073	6 1/8"	M
13074	6 5/8"	M
13075	8-7/8" 6 1/4"	M
13076	8 7/8"	F
13077	6 3/8"	M
13078	7"	F
13079	7 1/4"	M
13080	8"	F
13081	7"	F
13082	7 1/2"	M
13083	8 3/4"	M
13085	6 1/2"	F
13086	7 3/4"	F
13087	7 1/8"	M
13088	7"	M
13089	6 1/4"	M
13090	6 7/8"	M
13091	6 3/4"	M
13092	7 3/4"	M
13093	7 1/4"	M
13094	7 5/8"	M
13095	6 1/2"	F
13096	7 1/4"	F
13097	8 1/8"	M
13098	7 1/4"	F
13099	8 1/2"	M
13100	6 7/8"	M
13801	8 1/2"	M
13802	8"	F
13803	7 1/2"	F
13804	6 1/4"	M
13805	7 7/8"	M
13806	6 3/4"	F
13807	8"	M
13808	7 1/2"	M
13809	7 7/8"	F
13810	7 1/4"	M
13811	6 7/8"	M
13813	7 1/8"	F
13814	6"	F
13815	7 7/8"	M
13816	7 1/2"	M
13817	7 1/4"	M
13818	6 3/4"	F
13819	7"	M
13820	8"	M
13821	5 7/8"	M
13822	6 1/2"	M

EXPERIMENT A-6

Harrietta Hatchery, Sept. 14, 1931. Yearling Brook trout. Small tag on
base of tail. On top.

Tag No.	Size	Sex
15412	7 1/2"	F
15413	7 1/8"	F
15414	8 1/4"	M
15415	9"	F
15416	6 1/2"	F
15417	7 1/4"	M
15418	6 7/8"	M
15419	6 1/2"	F
15420	6 1/2"	M
15421	8 1/8"	F
15422	6 3/4"	F
15423	6 3/4"	F
15424	6 1/4"	F
15425	9"	F
15426	6"	F
15428	7"	F
15430	7"	F
15431	6 7/8"	M
15432	7 3/8"	M
15433	8"	M
15434	7 1/2"	M
15435	8"	M
15436	7 1/2"	M
15437	6"	F
15438	6 1/2"	F
15439	7 1/2"	M
15440	7"	M
15441	8 1/4"	M
15442	7 1/2"	F
15443	6 1/8"	F
15444	8 1/2"	M
15445	6 1/2"	M
15446	7 3/8"	F
15447	7 1/2"	F
15448	7"	M
15449	8"	M
15450	7"	F
15451	7 1/8"	M
15452	7"	M
15454	7 1/8"	F
15456	7"	M
15457	7 1/2"	M
15459	6 1/2"	M
15460	7 3/4"	F
15461	7 5/8"	F
15463	6"	M
15464	7 3/4"	M
15466	7"	M
15468	8"	M
15469	7 3/4"	M

EXPERIMENT A-7

Harrietta Hatchery, Sept. 15, 1931. Yearling Brook Trout. Small tag
on base of tail. On bottom.

Tag No.	Size	Sex
15471	7 1/2"	F
15472	8 1/2"	M
15473	7 3/8"	M
15474	6 1/2"	M
15475	6 3/8"	F
15476	7 3/8"	M
15477	7"	F
15478	6 1/2"	F
15479	7 7/8"	F
15480	7 3/8"	F
15481	7 1/2"	F
15482	6 1/2"	F
15483	6 3/8"	F
15485	6 3/8"	M
15487	8"	M
15489	7 7/8"	F
15490	7 1/4"	M
15491	7"	F
15492	7 7/8"	F
15493	6"	M
15494	6 1/2"	F
15495	8 1/4"	M
15496	7 1/2"	F
15497	7 1/4"	M
15498	7 3/4"	F
15499	6 1/4"	M
15500	7 1/4"	M
15501	8"	M
15502	8 1/4"	M
15503	7 3/8"	F
15504	7 5/8"	F
15505	7 1/4"	F
15506	8"	M
15507	7 1/4"	F
15508	7 5/8"	F
15509	6 1/2"	F
15510	7 1/8"	M
15511	6 7/8"	F
15512	8"	F
15513	7 3/4"	M
15514	6"	M
15515	8"	M
15516	9 1/4"	M
15517	6 1/4"	M
15518	7 1/8"	M
15519	8 1/8"	M
15520	8 1/4"	M
15521	7 1/4"	F
15522	7 1/4"	M
15523	7 3/4"	F

Bad Gills

EXPERIMENT A-8

Harrietta Hatchery, Sept. 15, 1931. Yearling Brook Trout. Small tag
on Dorsal Fin.

Tag No.	Size	Sex
15524	7 1/2"	M
15525	Tag Ruined
15526	Tag Ruined
15527	8 3/4"	M
15528	6 3/4"	F
15529	7 3/4"	F
15530	8 3/4"	M
15531	7"	F
15532	6 3/4"	F
15533	8 3/8"	M
15535	7 1/2"	F
15536	6 3/4"	F
15537	7 1/4"	F
15538	8 1/2"	M
15540	7 3/4"	M
15541	8"	F
15543	7 1/2"	M
15544	7 1/2"	M
15545	7 1/4"	M
15546	7 3/8"	M
15547	7 1/8"	M
15548	8 1/8"	M
15549	6 7/8"	M
15550	7 1/2"	M
15552	7 7/8"	M
15553	7 1/2"	M
15554	8 1/4"	F
15555	6 3/4"	F
15556	7 3/4"	F
15557	8"	M
15558	7"	M
15559	7 1/4"	F
15560	6 5/8"	F
15561	8"	F
15562	6 1/4"	M
15563	7 1/4"	F
15564	7"	M
15565	8 3/4"	M
15566	6"	M
15567	6 1/4"	F
15568	7 3/8"	M
15569	6 7/8"	F
15570	6 7/8"	F
15571	7 1/2"	M
15572	7 1/4"	M
15573	6 3/4"	F
15574	6 3/4"	F
15575	6 5/8"	M
15576	6 1/2"	M
15577	6 5/8"	M
15578	6 1/4"	M
15579	6 1/2"	M

EXPERIMENT B-1

Harrietta Hatchery, Sept. 15, 1931. On fingerlings 3 1/2"-4 1/2". Small tag on right gill cover.

Tag No.	Length	
15580	3 5/8"	
15581	Ruined	
15582	4"	
15583	Ruined	
15584	3 3/8"	Tag fell off
15585	4"	
15586	4"	
15587	4 3/8"	
15588	Ruined	
15589	3 1/2"	
15590	3 3/8"	
15591	3 3/4"	
15592	3 1/2"	
15593	3 3/4"	
15594	3 1/2"	
15595	3 3/4"	
15596	3 3/4"	
15597	4 1/8"	
15598	4"	
15599	3 5/8"	

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15600 -	
15645	Tags ruined & missing
15646	4 1/4"
15647	4 1/2"
15648	4 1/4"
15649	4 1/2"
15650	4 1/8"
15651	4"
15652	4 3/8"
15653	4 1/2"
15654	4 1/4"
15655	4 1/8"
15656	4 1/8"
15657	4 1/8"
15658	4 1/2"
15659	3 3/4"
15660	3 1/2"
15661	4 1/8"
15662	3 3/4"
15663	4 1/2"
15664	4 1/4"
15665	4 5/8"
15666	4 3/4"
15667	4 1/4"
15668	4 5/8"
15669	4 1/8"
15670	4 3/4"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15671	4 1/2"
15672	4 3/4"
15673	3 1/2"
15674	3 3/8"
15675	4 1/2"
15676	4 1/4"
15677	4"
15678	4"
15679	4 1/4"
15680	3 1/4"
15681	4 1/2"
15682	4 3/8"
15683	4 1/8"
15684	4 1/4"
15685	4 1/2"
15686	4 3/8"
15687	4"
15688	3 3/4"
15689	4"
15690	4"
15691	4" 3 5/8"
15692	4"
15693	4 3/8"
15694	4"
15695	3 1/2"
15696	4 3/4"
15697	4 1/2"
15698	4"
15699	4 1/2"
15700	4 1/2"
15701	4 1/4"
15702	4 1/8"
15703	Missing
15704	3 3/4"
15705	4 3/8"
15706	4 1/2"
15707	4"
15708	3 3/4"
15709	4 1/4"
15710	3 1/2"
15711	3 1/2"
15713	4"
15714	3 3/4"
15715	3 1/2"
15716	4 1/4" Threw in pond
15717	4"
15718	4 3/8"
15719	4 1/4"
15720	4"
15721	3 1/2"
15722	4 1/4 4 1/4"
15723	4 1/2"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15724	4 1/8"
15725	3 5/8"
15726	3 3/4"
15727	3 7/8"
15728	3 3/8"
15729	4 1/2"
15731	4"
15732	3 7/8"
15733	4 1/2"
15734	3 7/8"
15735	4"
15736	4 5/8"
15737	4 1/2"
15738	4 3/8"
15739	3 1/2"
15740	3 3/4"
15741	4 1/2"
15742	4 5/8"
15743	3 5/8"
15744	4 1/4"
15745	4"
15746	4 3/8"
15747	4 1/2"
15748	3 7/8"
15749	3"
15750	3 1/8"
15751	3 1/4"
15752	3 7/8"
15753	3 1/2"
15755	4"
15756	4 3/8"
15757	4 3/8"
15758	4 1/4"
15759	4 1/2"
15760	4 5/8"
15761	3 3/4"
15762	4 1/2"
15763	3 5/8"
15764	3 7/8"
15765	3 7/8"
15766	3 3/8"
15767	3 3/4"
15768	3 1/4"
15769	3 3/8"
15770	3 1/2"
15771	4"
15772	4 3/8"
15773	4 1/4"
15774	3 3/8"
15775	3 7/8"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15776	4 1/8"
15777	4 1/2"
15778	4 5/8"
15779	4 3/8"
15780	4"
15781	4 1/8"
15782	4 7/8"
15783	3 7/8"
15784	4 5/8"
15785	4 5/8"
15786	3 7/8"
15787	4"
15788	4 1/4"
15789	3 1/2"
15790	3 7/8"
15791	4 1/2"
15792	4 5/8"
15793	4"
15794	4 1/4"
15795	3 7/8"
15796	3 3/4"
15797	4 5/8"
15798	4 1/4"
15799	4 3/4"
15800	4 1/2"
15801 and 15803 - Tags missing.	
15804	4"
15805	4 3/8"
15806	Missing
15807	3 3/8"
15808	4"
15809	3 1/8"
15810	4 1/2"
15811	4"
15813	3 3/4"
15814	3 5/8"
15815	4 1/4"
15816	3 1/2"
15817	3 7/8"
15818	4 5/8"
15819	3 3/4"
15820	3 1/8"
15821	3 1/4"
15822	4 3/8"
15823	4 3 5/8"
15824	3 3/4"
15825	4 3/8"
15826	3 1/8"
15827	4"
15828	3 1/8"
15829	4 3/8"
15830	4 1/4"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15831	4"
15832	3 7/8"
15833	3 1/2"
15834	3 3/8"
15835	3 7/8"
15836	4"
15837	4 1/2"
15838	3 7/8"
15839	4 1/2"
15840	4 3/8"
15841	3 1/2"
15842	3 1/4"
15843	3 1/8"
15844	3 1/2"
15845	3 7/8"
15846	3 3/8"
15847	3 1/8"
15848	3 1/8"
15849	3 1/2"
15850	3 3/8"
15851	4 1/4"
15852	4 1/8"
15853	4 5/8"
15854	4 1/4"
15855	4 5/8"
15856	4 1/2"
15857	4 1/8"
15858	4 1/4"
15859	4 1/8"
15860	4 1/4"
15861	3 1/2"
15862	4 5/8"
15863	4 1/4"
15864	4 1/2"
15865	3 7/8"
15866	3 7/8"
15867	4"
15868	4 1/4"
15869	3 7/8"
15870	4 3/4"
15871	4 1/2"
15872	4 1/2"
15873	4 3/8"
15874	4 1/8"
15876	4"
15877	4"
15878	4 1/2"
15879	4 3/8"
15880	4 1/8"
15881	4"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15882	4 1/2"
15883	4"
15884	4 3/8"
15885	4 1/2"
15886	4 1/2"
15887	4"
15888	3 1/2"
15889	4"
15890	3 3/4"
15891	4 1/2"
15892	4 3/8"
15893	3 7/8"
15894	4 1/8"
15895	3 7/8"
15896	4 1/2"
15897	3 7/8"
15898	4 1/4"
15899	3 3/4"
15900	4"

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15901	3 3/4"
15902	4 1/8"
15903	3 3/4"
15904	3 5/8"
15905	4 1/4"
15906	3 3/8"
15907	4 3/8"
15908	3 1/4"
15909	3 3/4"
15910	4 1/8"
15911	4"
15912	4"
15913	3 1/2"
15914	3 3/8"
15915	3 7/8"
15916	3 1/4"
15917	3 1/2"
15918	4"
15919	4 5/8"
15920	4"
15921	4"
15922	3 3/4"
15923	4"
15924	4"
15925	3 1/2"
15926	4 1/4"
15927	3 1/2"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15928	3 3/4"
15929	4 5/8"
15930	4"
15931	3 3/4"
15932	3 7/8"
15933	3 7/8"
15934	4"
15935	3 5/8"
15936	3 1/2"
15937	3 5/8"
15938	3 3/4"
15939	3 5/8"
15940	3 5/8"
15941	3 1/4"
15942	4 1/8"
15943	4 1/2"
15944	4 5/8"
15945	4 1/4"
15946	3 1/4"
15947	3 3/8"
15948	3 1/4"
15949	4"
15950	3 3/4"
15951	3 3/8"
15952	3 3/8"
15953	3 1/4"
15954	4 1/2"
15955	3 3/4"
15956	4 1/2"
15957	4 1/2"
15958	4 1/2"
15959	4"
15960	4 1/2"
15961	4"
15962	4 1/8"
15963	3 7/8"
15964	4 1/8"
15965	3 5/8"
15966	4 1/2"
15967	4 3/4"
15968	3 3/8"
15969	3 7/8"
15970	3 3/4"
15971	3 1/2"
15972	3 1/8"
15973	3 5/8"
15974	4 1/8"
15975	4"
15976	4"
15977	4 3/8"

EXPERIMENT B-1

(Con.)

Tag No.	Length
15978	3 1/4"
15979	4 1/4"
15980	4"
15981	4"
15982	4 5/8"
15983	4 3/8"
15984	3 3/4"
15985	4"
15986	3 1/2"
15987	3 1/4"
15988	4 1/8"
15989	4 3/8"
15990	4 1/2"
15991	3 1/2"
15992	3 5/8"
15993	3 1/2"
15994	4 1/8"
15995	3 1/2"
15996	4"
15997	3 7/8"
15998	3 3/4"
15999	4 3/8"
16000 - 16140	Tags missing
16141	4 3/8"
16142	3 3/4"
16143	4"
16144	4 3/8"
16145	3 5/8"
16146	4 3/8"
16147	4"
16148	3 5/8"
16149	4 1/2"
16150	Missing
16151	4 1/4"
16152	4 3/8"
16153	4 1/4"
16154	3 7/8"
16155	3 1/2"
16156	3 5/8"
16157	3 5/8"
16158	4 7/8"
16159	3 7/8"
16160	4 1/2"
16161-16164	Missing
16165	4 1/2"
16166	3 1/2"
16167-16168	Missing
16169	4 1/8"
16170-16171	Missing
16172	3 7/8"
16173	3 3/4"
16174	3 3/4"

EXPERIMENT B-1

(Con.)

Tag No.	Length
16175	3 1/2"
16176-16179	Missing
16180	4 1/8"
16181	4"
16182	3 3/4"
16183	4 3/8"
16184	4 5/8"
16185	3 1/2"
16186-16193	Missing
16194	3 3/4"
16195	4"
16196	3 7/8"
16197	3 5/8"
16198	3 1/2"
16199	3 3/4"
16200	4"
16201-16434	Missing
16435	3 1/2"
16436	4 1/4"
16437	4 1/8"
16438	3 1/2"
16439	Missing
16440	4 1/4"
16441-16442	Missing
16443	4 3/8"
16444	4 1/8"
16445	4 5/8"
16446	4 3/8"
16447	Missing
16448	4 3/8"
16449	4"
16450	3 3/4"
16451	4 1/4"
16452	4 5/8"
16453	Missing
16454	4 1/4"
16455	4"
16456	4 1/2"
16457	Missing
16458	3 3/4"
16459	4"
16460	4 1/2"
16461	4"
16462	3 7/8"
16463	3 5/8"
16464	4"
16465	3 7/8"
16466	4 1/2"
16467	4"
16468	4 3/8"
16469	4 3/4"
16470	4 1/2"
16471	3 5/8"

EXPERIMENT B-1

(Con.)

Tag No.	Length
16472	4"
16473	4"
16474	4 1/8"
16475	3 5/8"
16476	3 1/2"
16477	3 3/4"
16478	3 1/2"
16479	4 1/8"
16480	4 3/8"
16481	4 3/8"
16482	3 3/4"
16483	3 3/4"
16484	4 1/2"
16485	4"
16486	4 1/8"
16487	3 1/2"
16488	4 1/4"
16489	4 1/8"
16490	3 7/8"
16491	3 5/8"
16492	4 3/8"
16493	4 1/4"
16494	4 1/2"
16495	4 1/8"
16496	3 1/2"
16497	3 3/4"
16498	3 3/4"
16499	3 7/8"
16500-16501	Missing
16502	4 1/2"
16503	Missing
16504	4 1/4"
16505	3 7/8"
16506	3 1/2"
16507	4 1/4"
16508	4"
16509	4 1/4"
16510	4 1/2"
16511-16512	Missing
16513	3 5/8"
16514	3 7/8"
16515	3 5/8"
16516	3 3/4"
16517	4"
16518	4"
16519	3 1/2"
16520	4 3/8"
16521	4 1/8"
16522	4 1/4"
16523	4 1/4"
16524	4 1/8"
16525	3 7/8"

EXPERIMENT B-1

(Con.)

Tag No.	Length
16526	4 1/4"
16527	3 3/4"
16528	4 1/4"
16529	4"
16530	3 7/8"
16531	3 3/4"
16532	4"
16533	4 1/2"
16534	3 1/2"
16535	4 1/4"
16536	3 7/8"
16537	3 1/2"
16538	3 1/2"
16539	4-1 1/2 4 1/4"
16540	4"
16541	4 1/2"
16542	4"
16543	3 3/4"
16544	4 1/8"
16545	3 7/8"
16546	4 1/2"
16547	4"
16548	3 7/8"
16549	4"
16550	3 3/4"
16551	4 1/2"
16552	4 3/8"
16553	4 1/2"
16554	4 1/8"
16555	3 3/4"
16556	3 5/8"
16557	3 1/2"
16558	4"
16559	4 1/4"
16560	4 1/8"
16561	4 1/4"
16562	4 1/2"
16563	3 3/4"

EXPERIMENT B-2

Harrietta Hatchery. Small tags on very small Fingerling S. T.
Right Gill Cover.

Tag No.	Length
16664	3 1/8"
16665	3"
16666	Guined
16667	3 3/8"
16668	3"
16669	3"
16670	3"
16671	2 7/8"
16672	2 3/4"
16673	2 7/8"
16674	2 3/4"
16675	2 7/8"
16676	2 7/8"
16677	2 1/2"
16678	2 3/8"
16679	2 3/4"
16680	2 1/2"
16681	2 1/4"
16682	2 3/8"
16683	2 1/8"
16684	2 1/8"
16685	2 1/4"
16686	3"
16687	2 7/8"
16688	2 3/8"
16689	2 1/4"
16690	3"
16691	2 3/4"
16692	3"
16693	2 7/8"
16694	Missing
16695	2 7/8"
16696	2 7/8"
16697	2 1/2"
16698	2 3/8"
16699	2 3/4"
16700	3"
16701	Missing
16702	3 "
16703	2 3/4"
16704	3 1/8"
16705	2 3/4"
16706	2 3/8"
16707	3 1/4"
16708	2 5/8"
16709	3"
16710	2 1/2"
16711	2 1/4"
16712	2-14/ 2 1/4"
16713	2 1/4"
16714	2 1/2"
16715	3"

EXPERIMENT B-2

(con.)

Tag No.	Length
16716	2 1/2"
16717	2 7/8"
16718	2 3/4"
16719	2 3/4"
16720-16721	Missing
16722	2 3/4"
16723	Missing
16724	2 5/8"
16725	2 5/8"
16726	2 1/2"
16727	2 5/8"
16728	2 5/8"
16729	2 1/2"
16730	2 1/2"
16731	2 3/4"
16732	3"
16733	2 1/2"
16734	2 7/8"
16735	2 5/8"
16736	2 7/8"
16737	2 3/4"
16738	2 1/4"
16739	3 1/8"
16740	2 5/8"
16741	3 1/2"
16742	3 1/2"
16743	3"
16744	3"
16745	2 7/8"
16746	3"
16747	2 5/8"
16748	3"
16749	3"
16750	3"
16751	2 3/8"
16752	2 7/8"
16753	2 3/4"
16754	3"
16755	2 7/8"
16756	2 7/8"
16757	3"
16758	3"
16759	2 3/4"
16760	2 1/2"
16761	3"
16762	2 3/4"
16763	2 3/4"
16764	2 1/2"
16765	2 7/8"
16766	3"
16767	2 3/4"
16768	3"
16769	3"

EXPERIMENT B-3

Harrietta Hatchery. On very large Fingerling S. T.

Right Gill Cover.

Tag No.	Length
16564	4"
16565	4 1/2"
16566	4 3/4"
16567	4"
16568	4 1/8"
16569	4 1/4"
16570	3 3/4"
16571	3 5/8"
16572	4 1/2"
16573	4 7/8"
16574	4 1/2"
16575	4 1/2"
16576	4"
16577	4 1/4"
16578	4 3/8"
16579	4 1/2"
16580	5"
16581	4 1/2"
16582	4 1/4"
16583	4"
16584	4"
16585	4 1/4"
16586	4"
16587	4 1/8"
16588	4"
16589	4"
16590	4 3/4"
16591	4 1/2"
16592	4 1/2"
16593	4"
16594	4 1/8"
16595	4 1/8"
16596	4 3/4"
16597	4 1/4"
16598	4 1/8"
16599	4 7/8"
16600	4 1/8"
16601	4"
16602	4 1/4"
16603	4"
16604	4 1/8"
16605	4"
16606	3 7/8"
16607	4 1/2"
16608	4 7/8"
16609	4 1/8"
16610	4 1/2"
16611	4 1/4"
16612	4 1/4"

EXPERIMENT B-3

(Cont.)

Tag No.	Length
16613	4 3/8"
16614	4 1/2"
16615	4 3/8"
16616	4 1/4"
16617	4 1/2"
16618	4 3/8"
16619	4"
16620	4 1/8"
16621	4 1/4"
16622	4 3/4"
16623	4"
16624	4 1/4"
16625	4"
16626	4 3/8"
16627	4 1/4"
16628	4"
16629	4"
16630	4"
16631	4 1/4"
16632	4 1/8"
16633	4 1/4"
16634	4"
16635	4"
16636	4 1/4"
16637	4 1/8"
16638	4"
16639	4 3/8"
16640	4 1/2"
16641	4"
16642	4 1/2"
16643	4 1/4"
16644	4 1/2"
16645	4"
16646	4"
16647	4"
16648	4 1/8"
16649	4 1/2"
16650	4"
16651	4 1/2"
16652	4"
16653	4"
16654	4"
16655	4 1/4"
16656	4 3/8"
16657	4 1/8"
16658	4 1/8"
16659	4 3/8"
16660	4 3/8"
16661	5 1/4"
16662	4 1/4"
16663	4 1/2"