

Table 2.2. Transforms for Midde Fork of John Day

Brood Year	Ln (Spawners)	Ln (Recruits to Columbia Mouth/Spawner)	LN(Spawners) De-trended	Ln (Spawners(t)/Spawners(t-4))	Spawners(t-4)	Recruits to Columbia Mouth	Ricker (Recruits to Columbia Mouth/Spawners) Residuals	Ricker (Recruits to Columbia Mouth/Spawners) Residuals Detrended	(t)/Spawners(t-4) Residuals Detrended	Recruits to Columbia Mouth/Spawners, Detrended	Spawners	Spawners Detrended	Spawners(t)/Spawners(t-4) Residuals
1970	6.067	1.071	0.38	0.064	459.6	1258.7	0.376	0.398	0.148	0.098	431.2	196.003	-0.144
1971	5.449	1.495	-0.271	0.775	505	1037.4	0.495	0.515	0.522	0.56	232.6	-29.185	0.259
1972	5.668	0.952	-0.086	0.258	374.5	749.8	0.039	0.057	0.063	0.055	289.4	1.027	-0.171
1973	5.497	0.863	-0.29	0.299	329.1	578.5	-0.119	-0.104	0.005	0.005	244	-70.961	-0.2
1974	6.13	0.955	0.31	0.269	601.6	1194.6	0.303	0.317	0.281	0.136	459.6	118.051	0.106
1975	6.225	0.657	0.371	0.08	547.2	974.1	0.075	0.086	0.134	-0.124	505	136.863	-0.013
1976	5.926	0.336	0.039	-0.188	310.4	524.1	-0.446	-0.437	-0.367	-0.406	374.5	-20.225	-0.484
1977	5.796	-0.316	-0.124	-0.783	150.4	239.9	-1.168	-1.162	-1.062	-1.02	329.1	-92.212	-1.15
1978	6.4	0.287	0.446	-0.361	419.2	801.3	-0.147	-0.143	-0.245	-0.379	601.6	153.7	-0.304
1979	6.305	-0.342	0.318	-0.747	259.2	388.7	-0.86	-0.857	-0.745	-0.969	547.2	72.712	-0.774
1980	5.738	0.919	-0.282	0.436	480	777.9	0.038	0.038	0.04	0.33	310.4	-190.676	0.04
1981	5.013	0.708	-1.04	0.532	256	305.4	-0.418	-0.42	-0.142	0.159	150.4	-377.264	-0.113
1982	6.038	0.678	-0.049	0.023	428.9	825.4	-0.036	-0.041	-0.262	0.166	419.2	-135.052	-0.203
1983	5.558	2.248	-0.563	2.007	1929.1	2453.7	1.288	1.282	1.444	1.775	259.2	-321.64	1.532
1984	6.174	1.397	0.02	1.047	1367.4	1941.6	0.777	0.768	0.798	0.963	480	-127.428	0.915
1985	5.545	1.393	-0.642	0.918	641.1	1031.2	0.429	0.418	0.292	0.998	256	-378.016	0.438
1986	6.061	-0.112	-0.159	-0.475	266.7	383.4	-0.811	-0.825	-0.862	-0.469	428.9	-231.704	-0.686
1987	7.565	-1.659	1.311	-2.274	198.6	367	-0.057	-0.073	-0.354	-1.978	1929.1	1241.908	-0.15
1988	7.221	-0.504	0.934	-0.803	612.8	826.1	0.237	0.219	0.213	-0.784	1367.4	653.62	0.447
1989	6.463	0.523	0.143	0.316	879.4	1081.3	0.149	0.129	0.172	0.281	641.1	-99.267	0.435