

Genetic Analysis of Chinook Salmon from the Napa River, California

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Introduction

The Napa River is the third largest tributary to the San Francisco/San Pablo Bay complex (referred to hereafter as SF Bay) after Alameda Creek and, of course, the Sacramento River. Historically, it is believed to have supported at least three species of salmonid fish (Bjorkstedt et al. 2005): steelhead (*Oncorhynchus mykiss*), coho (*O. kisutch*) and Chinook salmon (*O. tshawytscha*). Both salmon species were largely extinguished in the twentieth century, but, in the last several decades, Chinook salmon have again been observed in the basin, presumably through a process of recolonization. Over the last decade, juvenile salmon have been consistently trapped in the Napa River and carcasses of spawned-out fish have been observed frequently.

Because salmon were largely absent from SF Bay during the period (1980s and 1990s) when California salmon populations were initially considered for protection under the US Endangered Species Act (ESA), the emergent Napa River Chinook salmon population was not included in either of the nearby Chinook salmon Evolutionarily Significant Units (ESUs): the Central Valley Fall/Late Fall Run and the California Coastal Chinook Salmon ESUs. In spite of what now seems to be consistent presence of Chinook salmon spawning in tributaries of SF Bay, these populations continue to lack ESU designation and questions persist about the origin of the fish spawning in the Napa River and other SF Bay tributaries.

Here, we apply genetic analysis to samples taken from juveniles caught in downstream migrant trapping and from carcasses of adult Chinook salmon encountered in the Napa River basin. We evaluate the most likely origin of these fish, or their ancestors, to better understand the recolonization process. We also estimate the number of spawners

that contribute to the juveniles sampled. These data should help to inform the management of this population and the eventual designation of these fish into either the Central Valley Fall/Late Fall Run or California Coastal Chinook ESU.

Materials and Methods

For sampling years 2005-2011, all available samples from adult Chinook salmon (n=96) were genotyped. For sampling year 2010, 38 juveniles with known sampling date were genotyped, as were 181 additional juveniles for which fin clips were provided in a Falcon® tube dated June 10, 2010. Fin clips from sampling year 2011 were provided in vials labeled with sampling date ranging from April 6 to June 17, 2011. Three fin clips from each dated vial were genotyped for a total of 216 genotyped juveniles from 2011. A summary of samples successfully genotyped by year and life stage is found in Table 1.

All Napa River Chinook salmon samples were genotyped with single nucleotide polymorphisms (SNPs) using a panel of 96 Taqman® Custom SNP Genotyping Assays (Life Technologies, Inc.) that has been selected for use both in genetic stock identification (GSI) and parentage-based tagging (PBT) applications (Clemento et al. 2011). Genomic DNA was first extracted using DNeasy 96 tissue extraction kits on a BioRobot 3000 (Qiagen Inc.) following the manufacturer's protocols. Purified DNA samples were then diluted 1:10 in ddH₂O and a preamplification protocol used to enrich for the genomic regions containing the SNPs via multiplex polymerase chain reaction (PCR). Preamplification products were then loaded onto 96.96 Dynamic Genotyping Arrays (Fluidigm Corporation), which use nanofluidics to combine each of the 96 SNP assays with 96 samples that are then PCR

amplified to produce a total of 9,216 genotypes on each array. Genotyping arrays were imaged using a Fluidigm EP-1 instrument, and genotypes called using SNP Genotyping Analysis Software (version 2.1.1; Fluidigm). This SNP panel includes a genetic marker that allows coho salmon to be diagnostically discriminated from Chinook salmon, for which they are often mistaken.

Each genotype was checked against every other genotype to ensure it was not a duplicate (i.e. from the same individual) and then combined with its associated metadata. To ensure only high quality genotypes in the dataset, we also removed genotypes from nine individuals with levels of individual heterozygosity that were much higher or lower than typically observed in Chinook salmon or which had more than 20 loci that could not be reliably called. The resulting dataset was submitted to *gsi_sim* (Anderson et al. 2008) for assignment to their natal reporting group. Each assignment was based on interrogation of a reference baseline database of known genotypes for the SNP panel from 70 populations and 38 reporting groups, that encompasses all of the sizable Chinook salmon populations in California and representative populations throughout the rest of the species range (Clemento et al., in review). To estimate the number of breeders (effective population size) that contributed offspring to the sampled juveniles from each year class and to identify sibling groups within each year class, genotype data for the juveniles samples from 2010 and 2011 were submitted to the computer program Colony (v2.0.0.1; Jones and Wang 2010). Finally, genotypes for all juveniles, together with genotypes for adults from preceding years, were submitted to SNPPIT (Anderson 2010) to determine if any of the sampled adults were identified as parents of the sampled juveniles. Since it was only biologically possible for about ¼ of the adults to have been parents of the sampled

juveniles, this analysis was partially to test the reliability of the parentage reconstruction method, by determining whether any false positive (i.e. biologically impossible) parent/offspring combinations were identified.

Results

All individuals analyzed were assigned to the Central Valley Fall/Late Fall Run reporting group except for four juveniles from 2010, which assigned to the Klamath River reporting group with very high associated confidence. The details of the assignment analysis are found in Table 2. In addition, one juvenile fish from 2010 was homozygous for the coho salmon allele at the species-diagnostic SNP marker, but also had substantial missing data. The sample was reanalyzed, but the results from the second analysis of the diagnostic marker were ambiguous. A third analysis with a similar panel of 96 SNPs for coho salmon failed to yield acceptable genotype data, indicating that either this fish was not a Chinook or coho salmon, or that the sample was highly degraded.

The four juveniles assigned to the Klamath River reporting group were identified by Colony as full siblings, in spite of the fact that they were sampled on four different days in 2010 over a period of ~seven weeks (4/23-6/10/10). Colony estimated 9 breeders (95% CI: 4 to 24) to have produced all analyzed juveniles from 2010, and 74 breeders (95% CI: 53 to 106) to have produced all analyzed juveniles from 2011. No direct parent-child relationships were found by SNPIT

Discussion

Since the SF Bay complex is located between the southern end of the range of the California Coastal Chinook Salmon ESU and the western edge of the range of the Central Valley Fall/Late Fall Run Chinook Salmon ESU, it was unclear which of these two ESUs was the origin of the recolonizing Chinook salmon in the Napa River.

The present genetic analysis demonstrates clearly that the ancestry of Chinook salmon spawning in the Napa River is primarily from the Central Valley Fall/Late Fall Run ESU and not the Coastal Chinook ESU. This is consistent with the results of Garza and Pearse (2008), who showed similarly that salmon spawning in the Guadalupe River at the southern end of SF Bay are descended from Central Valley Fall/Late Fall run Chinook salmon. However, it is in contrast to the population relationships of steelhead, where populations spawning in tributaries of the SF Bay complex are most closely related to the adjacent coastal populations and not the Central Valley steelhead populations (Bjorkstedt et al. 2005; Garza and Pearse 2008). This is perhaps not surprising, given that the closest persistent population of Chinook salmon on the coast is in the Russian River, and there are none to the south of the Golden Gate (the entrance to SF Bay), whereas steelhead are present in every stream on the coast both to the south and north of the Golden Gate, as well as nearly every tributary stream in the SF Bay complex.

It is important to emphasize that this GSI determination of Central Valley fall run origin can not distinguish between the last several generations of ancestry. So, it is unclear if the adult fish and parents of the juvenile fish were born in the Central Valley or if they were born in the Napa River (or elsewhere), but have ancestors who were born in the

Central Valley. Ultimately, a robust temporal genetic monitoring program that utilizes a PBT approach would be necessary to determine the extent to which Chinook salmon spawning in the Napa River are the result of internal production or a continuous supply of migrants (strays) from the Central Valley and possibly elsewhere.

Interestingly, a small number of juvenile Chinook salmon were clearly descended from Klamath River origin parents and not Central Valley, or even Coastal Chinook, salmon. The four juveniles that assigned to the Klamath River reporting group were identified as such with extremely high confidence, indicating that this was not a statistical aberration. Moreover, all four of these juveniles were determined to be full siblings. Taken together, this indicates that Klamath River Chinook salmon occasionally stray into the Napa River. This is not unprecedented, since Klamath River Chinook salmon have been found in streams as far south as Monterey County (J.C. Garza and T.H. Williams, unpublished data). More surprisingly, the extremely high confidence of the individual assignments to the Klamath River reporting group indicates that these juveniles are not hybrids between Klamath River and Central Valley parents, but progeny of two Klamath River parents. This means that not only did at least two adult Klamath River salmon stray into the Napa River, but that they mated together, presumably in an preferential (assortative) manner. While this is only a single such observation, it raises interesting questions about whether Chinook salmon can recognize, and preferentially mate, with individuals from the same population when they are in a non-natal spawning location.

Unfortunately, the initial identification of one juvenile fish as a coho salmon could not be confirmed with secondary analysis. If confirmed, it would have been the first evidence of coho salmon spawning in an SF Bay stream in several decades. However, it is

likely that this fish was neither a coho nor a Chinook salmon. Fish assigned to the species *O. nerka* (sockeye salmon and kokanee) have been found in the Napa River in recent years (J. Koehler, personal communication), in spite of the fact that their native range does not extend south of Oregon, and it is possible that the ambiguous juvenile fish was in fact from that species. Further analysis of juvenile fish sampled in downstream migrant traps could determine whether any other native salmon species are spawning in the Napa River.

The estimates of the number of breeding adults/effective population size of Napa River Chinook salmon are low, but consistent with expectations for a population that is the result of recolonization by straying from nearby populations. The much lower estimate in 2010 than in 2011 is likely due to the fact that a very large fraction of the juvenile samples from that year came from a single day (6/10/10), whereas the 2011 samples came from a much more uniform distribution of dates. It should be emphasized that these are minimum estimates that are affected by both the unequal temporal representation as well as the relatively limited sample sizes analyzed. Further genetic analysis of juvenile Chinook salmon sampled in downstream migrant traps would provide more precise estimates of the number of breeding adults, as well as their provenance.

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Literature Cited

- Anderson EC, Waples RS, Kalinowski ST. 2008. An improved method for predicting the accuracy of genetic stock identification. Canadian Journal of Fisheries and Aquatic Sciences 65: 1475–1486.
- Bjorkstedt EB, Spence B, Garza JC, Hankin DG, Fuller D, Jones W, Smith J, Macedo R. 2005. An analysis of historical population structure for Evolutionarily Significant Units of Chinook salmon, coho salmon, and steelhead in the North-Central California Coast Recovery Domain. NOAA Technical Memorandum NMFS-SWFSC-382. 210 p.
- Clemento AJ, Abadía-Cardoso A, Starks H, Garza JC. 2011. Discovery and characterization of single nucleotide polymorphisms in Chinook salmon, *Oncorhynchus tshawytscha*. Molecular Ecology Resources 11 (Suppl 1): 50–66.
- Garza JC, Pearse DE. 2008. Population genetics of *Oncorhynchus mykiss* in the Santa Clara Valley Region. 53p.
- Jones OR, Wang J. 2010. COLONY: a program for parentage and sibship inference from multilocus genotype data. Molecular Ecology Resources 10: 551–555.

Table 1: Summary of assignment results.

Year	ADULT	JUVENILE	Grand Total
	CVFall	CVFall	KlamathR
2005	4		4
2006	17		17
2007	37		37
2008	14		14
2009		1	1
2010	23	215	4
2011	1	209	210
Grand Total	96	425	525

Table 2: Sample metadata and details of the individual assignment analysis. iHz=Individual Heterozygosity; No. Miss Loci= The number of loci, out of 96, that did not yield usable genotypes.

NMFS	Sample	Life				iHz	AssignedTo	Max		Max		Max		No. Miss Loci
		ID	ID	Length	Sex			Prob.1	Max.Pop.2	Prob.2	Max.Pop.3	Prob.3		
T031833	NC-05-01	850	F	Adult	12/7/05	0.358	CVFall-Deer_Cr	0.456	CVFall-Butte_C	0.410	CVFall-Mokelun	0.128	0	
T031834	NC-05-02	NA	M	Adult	12/7/05	0.453	CVFall-Mokelur	0.670	CVFall-Butte_C	0.184	CVFall-Mill_Cr	0.086	0	
T031835	NC-05-03	650	M	Adult	12/7/05	0.337	CVFall-Mokelur	0.647	CVFall-Butte_C	0.181	CVFall-Deer_Cr	0.157	0	
T031836	NC-05-04	102	M	Adult	12/7/05	0.242	CVFall-Mokelur	0.453	CVFall-Deer_Cr	0.408	CVFall-Butte_C	0.104	0	
T031837	NC-06-01	900	M	Adult	11/29/06	0.415	CVFall-Mokelur	0.853	CVFall-Butte_C	0.099	CVFall-Battle_C	0.018	1	
T031838	NR-06-01	NA	F	Adult	12/1/06	0.358	CVFall-Butte_C	0.598	CVFall-Mokelun	0.366	CVFall-Mill_Cr	0.021	0	
T031841	NR-06-04	800	F	Adult	12/1/06	0.368	CVFall-Butte_C	0.618	CVFall-Mokelun	0.298	CVFall-Mill_Cr	0.068	0	
T031842	NR-06-05	830	F	Adult	12/5/06	0.421	CVFall-Mokelur	0.538	CVFall-Butte_C	0.293	CVFall-Deer_Cr	0.115	0	
T031843	NR-06-06	NA	M	Adult	12/5/06	0.379	CVFall-Butte_C	0.486	CVFall-Mokelun	0.386	CVFall-Deer_Cr	0.093	0	
T031844	NR-06-07	NA	M	Adult	12/18/06	0.463	CVFall-Butte_C	0.430	CVFall-Mill_Cr	0.210	CVFall-Deer_Cr	0.192	0	
T031845	NR-06-07A	680	F	Adult	12/15/06	0.362	CVFall-Mokelur	0.531	CVFall-Mill_Cr	0.322	CVFall-Butte_C	0.116	1	
T031846	NR-06-08	770	M	Adult	12/18/06	0.447	CVFall-Butte_C	0.645	CVFall-Mokelun	0.175	CVFall-Battle_C	0.086	1	
T031847	NR-06-09	900	M	Adult	12/18/06	0.316	CVFall-Butte_C	0.893	CVFall-Deer_Cr	0.074	CVFall-Mill_Cr	0.024	0	
T031848	NR-06-10	630	F	Adult	12/20/06	0.347	CVFall-Butte_C	0.479	CVFall-Mokelun	0.313	CVFall-Deer_Cr	0.142	0	
T031849	NR-06-11	700	M	Adult	12/20/06	0.340	CVFall-Mokelur	0.787	CVFall-Butte_C	0.196	CVFall-Deer_Cr	0.010	1	
T031850	NR-06-12	900	M	Adult	12/20/06	0.274	CVFall-Butte_C	0.921	CVFall-Deer_Cr	0.036	CVFall-Mokelun	0.024	0	
T031851	NR-06-13	570	M	Adult	12/20/06	0.400	CVFall-Mokelur	0.524	CVFall-Butte_C	0.319	CVFall-Deer_Cr	0.075	0	
T031852	NR-06-14	880	M	Adult	12/20/06	0.344	CVFall-Mokelur	0.783	CVFall-Butte_C	0.114	CVFall-Mill_Cr	0.064	2	
T031853	NR-06-15	710	F	Adult	12/20/06	0.295	CVFall-Butte_C	0.656	CVFall-Mokelun	0.202	CVFall-Mill_Cr	0.117	0	
T031854	NR-06-20	880	M	Adult	1/3/07	0.326	CVFall-Mokelur	0.656	CVFall-Butte_C	0.328	CVFall-Mill_Cr	0.012	0	
T031855	NR-06-21	860	F	Adult	1/3/07	0.379	CVFall-Mokelur	0.708	CVFall-Butte_C	0.212	CVFall-Mill_Cr	0.042	0	
T031856	NR-06-22	800	F	Adult	1/5/07	0.383	CVFall-Mokelur	0.470	CVFall-Butte_C	0.218	CVFall-Deer_Cr	0.217	1	
T031857	NR-06-23	810	F	Adult	1/5/07	0.379	CVFall-Butte_C	0.732	CVFall-Deer_Cr	0.228	CVFall-Mokelun	0.018	0	
T031858	NR-06-24	830	F	Adult	1/5/07	0.411	CVFall-Butte_C	0.565	CVFall-Mokelun	0.176	CVFall-Mill_Cr	0.160	0	
T031859	NR-06-25	750	F	Adult	1/5/07	0.376	CVFall-Mokelur	0.468	CVFall-Butte_C	0.308	CVFall-Mill_Cr	0.104	2	
T031861	NR-06-27	1010	M	Adult	1/5/07	0.267	CVFall-Butte_C	0.807	CVFall-Mokelun	0.138	CVFall-Deer_Cr	0.041	9	
T031862	NR-06-28	830	F	Adult	1/5/07	0.326	CVFall-Butte_C	0.598	CVFall-Deer_Cr	0.218	CVFall-Mill_Cr	0.104	0	
T031865	NR-06-31	630	M	Adult	1/5/07	0.190	CVFall-Butte_C	0.588	CVFall-Mokelun	0.275	CVFall-Deer_Cr	0.112	11	
T031866	NR-06-32	800	M	Adult	1/5/07	0.421	CVFall-Butte_C	0.500	CVFall-Mokelun	0.241	CVFall-Mill_Cr	0.237	0	
T031868	NR-06-34	840	F	Adult	1/5/07	0.221	CVFall-Butte_C	0.650	CVFall-Deer_Cr	0.283	CVFall-Mokelun	0.051	0	
T031871	NR-06-50	720	F	Adult	1/12/07	0.316	CVFall-Butte_C	0.629	CVFall-Mill_Cr	0.188	CVFall-Mokelun	0.145	0	
T031872	NR-06-51	810	M	Adult	1/12/07	0.308	CVFall-Butte_C	0.419	CVFall-Mokelun	0.268	CVFall-Deer_Cr	0.240	4	

Table 2: Sample metadata and details of the individual assignment analysis. iHz=Individual Heterozygosity; No. Miss Loci= The number of loci, out of 96, that did not yield usable genotypes.

T031873	NR-06-52	710	F	Adult	1/12/07	0.266	CVFall-Butte_C	0.542	CVFall-Deer_Cr	0.242	CVFall-Mokelun	0.115	1
T031874	NR-06-53	860	F	Adult	1/12/07	0.432	CVFall-Butte_C	0.474	CVFall-Mokelun	0.360	CVFall-Deer_Cr	0.137	0
T031875	NR-06-54	780	F	Adult	1/12/07	0.302	CVFall-Deer_Cr	0.623	CVFall-Butte_C	0.148	CVFall-Mokelun	0.123	9
T031876	NR-06-55	680	M	Adult	1/12/07	0.305	CVFall-Butte_C	0.472	CVFall-Mokelun	0.306	CVFall-Mill_Cr	0.194	0
T031877	NR-06-56	830	F	Adult	1/12/07	0.372	CVFall-Deer_Cr	0.418	CVFall-Butte_C	0.328	CVFall-Mokelun	0.161	1
T031878	NR-06-57	860	M	Adult	1/12/07	0.326	CVFall-Butte_C	0.479	CVFall-Mokelun	0.213	CVFall-Deer_Cr	0.211	0
T031879	NR-06-58	710	F	Adult	1/12/07	0.375	CVFall-Mokelur	0.506	CVFall-Butte_C	0.313	CVFall-Mill_Cr	0.101	7
T031880	NR-06-59	640	F	Adult	1/12/07	0.319	CVFall-Mokelur	0.847	CVFall-Deer_Cr	0.136	CVFall-Butte_C	0.016	1
T031883	NR-07-01	850	M	Adult	12/26/07	0.379	CVFall-Butte_C	0.637	CVFall-Mokelun	0.267	CVFall-Mill_Cr	0.073	0
T031884	NR-07-02	NA	F	Adult	12/26/07	0.383	CVFall-Butte_C	0.381	CVFall-Mokelun	0.364	CVFall-Deer_Cr	0.216	1
T031885	NR-07-03	NA	F	Adult	12/26/07	0.379	CVFall-Butte_C	0.842	CVFall-Mill_Cr	0.091	CVFall-Deer_Cr	0.036	0
T031886	NR-07-04	NA	NA	Adult	12/26/07	0.358	CVFall-Butte_C	0.358	CVFall-Mokelun	0.305	CVFall-Mill_Cr	0.267	0
T031887	NR-07-05	750	F	Adult	12/27/07	0.358	CVFall-Butte_C	0.480	CVFall-Mill_Cr	0.267	CVFall-Mokelun	0.205	0
T031888	NR-07-06	NA	F	Adult	12/28/07	0.263	CVFall-Mokelur	0.388	CVFall-Deer_Cr	0.342	CVFall-Butte_C	0.241	0
T031889	NR-07-07	NA	M	Adult	1/3/08	0.358	CVFall-Mokelur	0.800	CVFall-Deer_Cr	0.164	CVFall-Butte_C	0.035	0
T031890	NR-07-08	750	F	Adult	1/3/08	0.400	CVFall-Butte_C	0.389	CVFall-Mill_Cr	0.250	CVFall-Deer_Cr	0.231	0
T031891	NR-07-09	NA	NA	Adult	1/3/08	0.316	CVFall-Mokelur	0.407	CVFall-Butte_C	0.342	CVFall-Mill_Cr	0.135	0
T031892	NR-07-10	NA	F	Adult	1/3/08	0.253	CVFall-Butte_C	0.646	CVFall-Mokelun	0.212	CVFall-Deer_Cr	0.100	0
T031893	NR-07-11	NA	M	Adult	1/3/08	0.316	CVFall-Mokelur	0.407	CVFall-Butte_C	0.342	CVFall-Mill_Cr	0.135	0
T031894	NR-07-12	850	M	Adult	1/3/08	0.358	CVFall-Mokelur	0.605	CVFall-Butte_C	0.225	CVFall-Mill_Cr	0.088	0
T031895	NR-07-13	NA	F	Adult	1/3/08	0.295	CVFall-Butte_C	0.386	CVFall-Butte_C	0.379	CVFall-Mokelun	0.124	0
T031896	NR-07-14	NA	NA	Adult	1/3/08	0.383	CVFall-Butte_C	0.691	CVFall-Deer_Cr	0.134	CVFall-Mokelun	0.124	1
T031897	NR-07-15	NA	F	Adult	1/3/08	0.379	CVFall-Mokelur	0.882	CVFall-Mill_Cr	0.049	CVFall-Deer_Cr	0.036	0
T031898	NR-07-16	760	F	Adult	1/3/08	0.312	CVFall-Mill_Cr	0.394	CVFall-Mokelun	0.324	CVFall-Butte_C	0.234	2
T031899	NR-07-17	NA	F	Adult	1/3/08	0.368	CVFall-Butte_C	0.554	CVFall-Deer_Cr	0.348	CVFall-Mokelun	0.087	0
T031900	NR-07-18	900	M	Adult	1/3/08	0.400	CVFall-Mokelur	0.559	CVFall-Butte_C	0.406	CVFall-Mill_Cr	0.020	0
T031901	NR-07-19	810	F	Adult	1/3/08	0.376	CVFall-Butte_C	0.608	CVFall-Mokelun	0.228	CVFall-Mill_Cr	0.084	2
T031902	NR-07-20	750	F	Adult	1/3/08	0.330	CVFall-Mokelur	0.563	CVFall-Deer_Cr	0.294	CVFall-Butte_C	0.137	1
T031903	SA-07-1	950	M	Adult	12/28/07	0.347	CVFall-Mokelur	0.337	CVFall-Mill_Cr	0.305	CVFall-Butte_C	0.237	0
T031904	SA-07-2	850	M	Adult	12/28/07	0.253	CVFall-Deer_Cr	0.627	CVFall-Mokelun	0.202	CVFall-Butte_C	0.145	0
T031905	SA-07-3	700	F	Adult	12/28/07	0.436	CVFall-Butte_C	0.407	CVFall-Mokelun	0.381	CVFall-Deer_Cr	0.191	1
T031906	SA-07-4	850	M	Adult	12/28/07	0.358	CVFall-Butte_C	0.737	CVFall-Mill_Cr	0.161	CVFall-Mokelun	0.072	0
T032191	NR-CH-09-	90	NA	Juv	5/2/09	0.351	CVFall-Butte_C	0.381	CVFall-Butte_C	0.371	CVFall-Mokelun	0.210	1
T085440	NR-06-03	850	F	Adult	12/1/06	0.415	CVFall-Mill_Cr	0.326	CVFall-Butte_C	0.278	CVFall-Mokelun	0.137	1
T085441	NR-06-26	820	F	Adult	1/5/07	0.326	CVFall-Mokelur	0.469	CVFall-Butte_C	0.332	CVFall-Deer_Cr	0.184	3

Table 2: Sample metadata and details of the individual assignment analysis. iHz=Individual Heterozygosity; No. Miss Loci= The number of loci, out of 96, that did not yield usable genotypes.

T085442	NR-06-29	790	F	Adult	1/5/07	0.386	CVFall-Butte_C	0.383	CVFall-Mokelun	0.337	CVFall-Deer_Cr	0.209	12
T085443	NR-06-30	660	M	Adult	1/5/07	0.351	CVFall-Mokelur	0.591	CVFall-Butte_C	0.291	CVFall-Deer_Cr	0.099	1
T085444	NR-06-33	NA	F	Adult	1/5/07	0.260	CVFall-Butte_C	0.505	CVFall-Deer_Cr	0.361	CVFall-Battle_C	0.048	18
T085445	NR-06-35	760	F	Adult	1/5/07	0.435	CVFall-Mokelur	0.659	CVFall-Butte_C	0.120	CVFall-Mill_Cr	0.111	3
T085446	NR-06-36	910	F	Adult	1/5/07	0.415	CVFall-Butte_C	0.622	CVFall-Mokelun	0.205	CVFall-Deer_Cr	0.152	1
T085447	NR-CH-10-	70	NA	Juv	3/17/10	0.295	CVFall-Butte_C	0.521	CVFall-Mill_Cr	0.200	CVFall-Mokelun	0.139	0
T085448	NR-CH-10-	109	NA	Juv	4/23/10	0.284	KlamathR_IGH	1.000	CVFall-Butte_C	0.000	CVSpring-Butte	0.000	0
T085449	NR-CH-10-	86	NA	Juv	4/24/10	0.400	CVFall-Mokelur	0.340	CVFall-Butte_C	0.322	CVFall-Mill_Cr	0.181	0
T085450	NR-CH-10-	90	NA	Juv	4/27/10	0.326	CVFall-Mokelur	0.526	CVFall-Butte_C	0.279	CVFall-Battle_C	0.141	0
T085451	NR-CH-10-	87	NA	Juv	4/28/10	0.301	KlamathR_IGH	1.000	CVSpring-Butte	0.000	CVSpring-Mill	0.000	2
T085452	NR-CH-10-	103	NA	Juv	4/28/10	0.326	CVFall-Butte_C	0.660	CVFall-Mill_Cr	0.160	CVFall-Deer_Cr	0.065	0
T085453	NR-CH-10-	86	NA	Juv	4/29/10	0.379	CVFall-Mokelur	0.821	CVFall-Butte_C	0.139	CVFall-Deer_Cr	0.029	0
T085454	NR-CH-10-	85	NA	Juv	4/30/10	0.432	CVFall-Butte_C	0.506	CVFall-Mokelun	0.366	CVFall-Deer_Cr	0.053	0
T085455	NR-CH-10-	81	NA	Juv	4/30/10	0.419	CVFall-Mokelur	0.376	CVFall-Mill_Cr	0.217	CVFall-Butte_C	0.194	2
T085457	NR-CH-10-	94	NA	Juv	5/1/10	0.457	CVFall-Butte_C	0.608	CVFall-Mokelun	0.160	CVFall-Mill_Cr	0.157	1
T085458	NR-CH-10-	81	NA	Juv	5/1/10	0.387	CVFall-Butte_C	0.418	CVFall-Mokelun	0.413	CVFall-Mill_Cr	0.133	2
T085459	NR-CH-10-	80	NA	Juv	5/1/10	0.277	CVFall-Mokelur	0.469	CVFall-Butte_C	0.355	CVFall-Mill_Cr	0.127	1
T085460	NR-CH-10-	85	NA	Juv	5/2/10	0.362	CVFall-Mokelur	0.887	CVFall-Butte_C	0.071	CVFall-Deer_Cr	0.037	1
T085461	NR-CH-10-	82	NA	Juv	5/2/10	0.347	CVFall-Butte_C	0.699	CVFall-Mokelun	0.228	CVFall-Deer_Cr	0.037	0
T085462	NR-CH-10-	80	NA	Juv	5/2/10	0.358	CVFall-Mokelur	0.947	CVFall-Mill_Cr	0.035	CVFall-Butte_C	0.008	0
T085463	NR-CH-10-	82	NA	Juv	5/3/10	0.284	CVFall-Mokelur	0.933	CVFall-Mill_Cr	0.026	CVFall-Butte_C	0.022	0
T085464	NR-CH-10-	86	NA	Juv	5/3/10	0.368	CVFall-Mokelur	0.882	CVFall-Butte_C	0.082	CVFall-Deer_Cr	0.028	0
T085465	NR-CH-10-	83	NA	Juv	5/4/10	0.436	CVFall-Mokelur	0.942	CVFall-Butte_C	0.029	CVFall-Deer_Cr	0.028	1
T085466	NR-CH-10-	86	NA	Juv	5/4/10	0.316	CVFall-Mokelur	0.892	CVFall-Mill_Cr	0.039	CVFall-Butte_C	0.031	0
T085467	NR-CH-10-	84	NA	Juv	5/4/10	0.394	CVFall-Butte_C	0.409	CVFall-Mill_Cr	0.266	CVFall-Mokelun	0.176	1
T085468	NR-CH-10-	79	NA	Juv	5/5/10	0.389	CVFall-Mokelur	0.791	CVFall-Butte_C	0.182	CVFall-Deer_Cr	0.013	0
T085469	NR-CH-10-	84	NA	Juv	5/5/10	0.453	CVFall-Mokelur	0.620	CVFall-Butte_C	0.310	CVFall-Deer_Cr	0.037	0
T085470	NR-CH-10-	83	NA	Juv	5/5/10	0.284	CVFall-Butte_C	0.547	CVFall-Mokelun	0.316	CVFall-Mill_Cr	0.074	0
T085471	NR-CH-10-	92	NA	Juv	5/5/10	0.337	CVFall-Mokelur	0.594	CVFall-Butte_C	0.159	CVFall-Battle_C	0.128	0
T085472	NR-CH-10-	86	NA	Juv	5/5/10	0.340	CVFall-Mokelur	0.594	CVFall-Butte_C	0.249	CVFall-Deer_Cr	0.089	1
T085473	NR-CH-10-	83	NA	Juv	5/5/10	0.383	CVFall-Mokelur	0.520	CVFall-Butte_C	0.282	CVFall-Deer_Cr	0.148	1
T085474	NR-CH-10-	81	NA	Juv	5/5/10	0.411	CVFall-Mokelur	0.678	CVFall-Butte_C	0.182	CVFall-Deer_Cr	0.137	0
T085475	NR-CH-10-	82	NA	Juv	5/5/10	0.394	CVFall-Butte_C	0.646	CVFall-Mokelun	0.271	CVFall-Deer_Cr	0.054	1
T085476	NR-CH-10-	80	NA	Juv	5/5/10	0.358	CVFall-Butte_C	0.638	CVFall-Mokelun	0.216	CVFall-Mill_Cr	0.091	0
T085477	NR-CH-10-	88	NA	Juv	5/5/10	0.537	CVFall-Mokelur	0.651	CVFall-Butte_C	0.236	CVFall-Deer_Cr	0.095	0

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T085478	NR-CH-10-	102	NA	Juv	5/5/10	0.368	KlamathR_IGH	1.000	CVSpring-Butte	0.000	CVSpring-Mill	0.000	0
T085479	NR-CH-10-	83	NA	Juv	5/5/10	0.284	CVFall-Mokelur	0.897	CVFall-Butte_C	0.065	CVFall-Mill_Cr	0.028	0
T085480	NR-CH-10-	85	NA	Juv	5/5/10	0.387	CVFall-Butte_C	0.363	CVFall-Mokelur	0.351	CVFall-Mill_Cr	0.193	2
T085481	NR-CH-10-	83	NA	Juv	5/5/10	0.358	CVFall-Mokelur	0.652	CVFall-Mill_Cr	0.167	CVFall-Butte_C	0.114	0
T085482	NR-CH-10-	84	NA	Juv	5/5/10	0.394	CVFall-Butte_C	0.555	CVFall-Mokelur	0.284	CVFall-Deer_Cr	0.142	1
T085483	NR-CH-10-	86	NA	Juv	5/5/10	0.368	CVFall-Mokelur	0.712	CVFall-Butte_C	0.167	CVFall-Deer_Cr	0.085	0
T085484	NR-CH-10-	NA	NA	Juv	6/1/10	0.337	CVFall-Deer_Cr	0.894	CVFall-Butte_C	0.060	CVFall-Mill_Cr	0.025	0
T085485	NR-CH-10-	NA	NA	Juv	6/1/10	0.372	CVFall-Mokelur	0.893	CVFall-Butte_C	0.066	CVFall-Mill_Cr	0.027	1
T085486	NR-06-2	NA	NA	Adult	12/1/06	0.275	CVFall-Deer_Cr	0.380	CVFall-Butte_C	0.357	CVFall-Mokelur	0.175	15
T085488	NR-CH-10-	NA	NA	Juv	6/10/10	0.295	CVFall-Deer_Cr	0.650	CVFall-Butte_C	0.205	CVFall-Mill_Cr	0.101	0
T085489	NR-CH-10-	NA	NA	Juv	6/10/10	0.453	CVFall-Mokelur	0.736	CVFall-Butte_C	0.159	CVFall-Deer_Cr	0.102	0
T085490	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Mokelur	0.561	CVFall-Butte_C	0.385	CVFall-Deer_Cr	0.045	0
T085491	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Butte_C	0.406	CVFall-Butte_C	0.403	CVFall-Deer_Cr	0.133	0
T085492	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Mokelur	0.714	CVFall-Butte_C	0.238	CVFall-Mill_Cr	0.024	0
T085493	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.723	CVFall-Butte_C	0.200	CVFall-Deer_Cr	0.076	0
T085494	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Butte_C	0.490	CVFall-Mokelur	0.359	CVFall-Deer_Cr	0.118	0
T085495	NR-CH-10-	NA	NA	Juv	6/10/10	0.426	CVFall-Mokelur	0.479	CVFall-Deer_Cr	0.263	CVFall-Butte_C	0.244	1
T085496	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Deer_Cr	0.600	CVFall-Butte_C	0.199	CVFall-Mokelur	0.099	0
T085497	NR-CH-10-	NA	NA	Juv	6/10/10	0.468	CVFall-Deer_Cr	0.382	CVFall-Butte_C	0.305	CVFall-Mokelur	0.286	1
T085498	NR-CH-10-	NA	NA	Juv	6/10/10	0.358	CVFall-Mokelur	0.553	CVFall-Butte_C	0.229	CVFall-Deer_Cr	0.210	0
T085499	NR-CH-10-	NA	NA	Juv	6/10/10	0.426	CVFall-Mokelur	0.650	CVFall-Deer_Cr	0.243	CVFall-Butte_C	0.104	1
T085500	NR-CH-10-	NA	NA	Juv	6/10/10	0.394	CVFall-Butte_C	0.431	CVFall-Mokelur	0.314	CVFall-Mill_Cr	0.223	1
T085501	NR-CH-10-	NA	NA	Juv	6/10/10	0.234	CVFall-Mill_Cr	0.394	CVFall-Deer_Cr	0.354	CVFall-Butte_C	0.148	1
T085502	NR-CH-10-	NA	NA	Juv	6/10/10	0.366	CVFall-Mokelur	0.546	CVFall-Mill_Cr	0.248	CVFall-Deer_Cr	0.080	2
T085503	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Butte_C	0.680	CVFall-Mokelur	0.240	CVFall-Deer_Cr	0.056	0
T085504	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Butte_C	0.546	CVFall-Mokelur	0.234	CVFall-Deer_Cr	0.199	0
T085505	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Mokelur	0.580	CVFall-Butte_C	0.229	CVFall-Deer_Cr	0.189	0
T085506	NR-CH-10-	NA	NA	Juv	6/10/10	0.305	CVFall-Deer_Cr	0.495	CVFall-Mokelur	0.297	CVFall-Butte_C	0.124	0
T085507	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Butte_C	0.379	CVFall-Butte_C	0.370	CVFall-Mill_Cr	0.196	0
T085508	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Mokelur	0.706	CVFall-Deer_Cr	0.179	CVFall-Butte_C	0.115	0
T085509	NR-CH-10-	NA	NA	Juv	6/10/10	0.453	CVFall-Mokelur	0.501	CVFall-Butte_C	0.422	CVFall-Deer_Cr	0.052	0
T085510	NR-CH-10-	NA	NA	Juv	6/10/10	0.305	CVFall-Mokelur	0.533	CVFall-Butte_C	0.385	CVFall-Mill_Cr	0.053	0
T085511	NR-CH-10-	NA	NA	Juv	6/10/10	0.447	CVFall-Butte_C	0.769	CVFall-Mokelur	0.074	CVFall-Mill_Cr	0.072	1
T085512	NR-CH-10-	NA	NA	Juv	6/10/10	0.468	CVFall-Mokelur	0.729	CVFall-Butte_C	0.176	CVFall-Deer_Cr	0.076	1
T085513	NR-CH-10-	NA	NA	Juv	6/10/10	0.484	CVFall-Butte_C	0.676	CVFall-Mokelur	0.229	CVFall-Deer_Cr	0.067	0

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T085514	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Butte_C	0.488	CVFall-Mokelun	0.364	CVFall-Deer_Cr	0.103	0
T085515	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Mokelur	0.902	CVFall-Butte_C	0.066	CVFall-Deer_Cr	0.027	0
T085516	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Butte_C	0.748	CVFall-Deer_Cr	0.140	CVFall-Mokelun	0.077	0
T085517	NR-CH-10-	NA	NA	Juv	6/10/10	0.298	KlamathR_IGH	1.000	CVSpring-Butte	0.000	CVSpring-Mill	0.000	1
T085518	NR-CH-10-	NA	NA	Juv	6/10/10	0.436	CVFall-Mokelur	0.593	CVFall-Butte_C	0.316	CVFall-Deer_Cr	0.047	1
T085519	NR-CH-10-	NA	NA	Juv	6/10/10	0.463	CVFall-Butte_C	0.603	CVFall-Mokelun	0.184	CVFall-Mill_Cr	0.114	0
T085520	NR-CH-10-	NA	NA	Juv	6/10/10	0.387	CVFall-Mokelur	0.384	CVFall-Butte_C	0.366	CVFall-Mill_Cr	0.199	2
T085521	NR-CH-10-	NA	NA	Juv	6/10/10	0.309	CVFall-Mokelur	0.672	CVFall-Butte_C	0.269	CVFall-Deer_Cr	0.054	1
T085522	NR-CH-10-	NA	NA	Juv	6/10/10	0.309	CVFall-Butte_C	0.589	CVFall-Mokelun	0.343	CVFall-Deer_Cr	0.051	1
T085523	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Mokelur	0.911	CVFall-Butte_C	0.060	CVFall-Deer_Cr	0.029	0
T085524	NR-CH-10-	NA	NA	Juv	6/10/10	0.379	CVFall-Deer_Cr	0.672	CVFall-Mokelun	0.249	CVFall-Butte_C	0.077	0
T085525	NR-CH-10-	NA	NA	Juv	6/10/10	0.376	CVFall-Butte_C	0.650	CVFall-Mokelun	0.149	CVFall-Mill_Cr	0.130	2
T085526	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Deer_Cr	0.736	CVFall-Butte_C	0.139	CVFall-Mill_Cr	0.091	0
T085527	NR-CH-10-	NA	NA	Juv	6/10/10	0.409	CVFall-Mokelur	0.784	CVFall-Butte_C	0.127	CVFall-Deer_Cr	0.086	2
T085528	NR-CH-10-	NA	NA	Juv	6/10/10	0.287	CVFall-Deer_Cr	0.839	CVFall-Butte_C	0.062	CVFall-Mill_Cr	0.056	1
T085529	NR-CH-10-	NA	NA	Juv	6/10/10	0.295	CVFall-Deer_Cr	0.634	CVFall-Butte_C	0.207	CVFall-Mill_Cr	0.092	0
T085530	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Mokelur	0.306	CVFall-Butte_C	0.287	CVFall-Mill_Cr	0.231	0
T085531	NR-CH-10-	NA	NA	Juv	6/10/10	0.347	CVFall-Butte_C	0.505	CVFall-Deer_Cr	0.206	CVFall-Mill_Cr	0.151	0
T085532	NR-CH-10-	NA	NA	Juv	6/10/10	0.453	CVFall-Mokelur	0.837	CVFall-Butte_C	0.100	CVFall-Deer_Cr	0.061	0
T085533	NR-CH-10-	NA	NA	Juv	6/10/10	0.394	CVFall-Mokelur	0.470	CVFall-Butte_C	0.427	CVFall-Deer_Cr	0.093	1
T085534	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Mokelur	0.831	CVFall-Deer_Cr	0.146	CVFall-Butte_C	0.021	0
T085536	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Mokelur	0.442	CVFall-Butte_C	0.226	CVFall-Mill_Cr	0.149	0
T085537	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Butte_C	0.477	CVFall-Mokelun	0.350	CVFall-Deer_Cr	0.090	0
T085538	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Butte_C	0.464	CVFall-Mokelun	0.452	CVFall-Deer_Cr	0.067	0
T085539	NR-CH-10-	NA	NA	Juv	6/10/10	0.442	CVFall-Mokelur	0.417	CVFall-Butte_C	0.352	CVFall-Deer_Cr	0.219	0
T085540	NR-CH-10-	NA	NA	Juv	6/10/10	0.442	CVFall-Butte_C	0.526	CVFall-Deer_Cr	0.252	CVFall-Mokelun	0.117	0
T085541	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Mokelur	0.459	CVFall-Butte_C	0.277	CVFall-Deer_Cr	0.195	0
T085542	NR-CH-10-	NA	NA	Juv	6/10/10	0.351	CVFall-Butte_C	0.414	CVFall-Deer_Cr	0.296	CVFall-Mokelun	0.205	1
T085543	NR-CH-10-	NA	NA	Juv	6/10/10	0.266	CVFall-Deer_Cr	0.786	CVFall-Butte_C	0.094	CVFall-Mokelun	0.078	1
T085544	NR-CH-10-	NA	NA	Juv	6/10/10	0.347	CVFall-Deer_Cr	0.484	CVFall-Mill_Cr	0.319	CVFall-Butte_C	0.155	0
T085545	NR-CH-10-	NA	NA	Juv	6/10/10	0.340	CVFall-Deer_Cr	0.615	CVFall-Mill_Cr	0.213	CVFall-Mokelun	0.083	1
T085546	NR-CH-10-	NA	NA	Juv	6/10/10	0.287	CVFall-Deer_Cr	0.924	CVFall-Butte_C	0.058	CVFall-Mokelun	0.010	1
T085547	NR-CH-10-	NA	NA	Juv	6/10/10	0.255	CVFall-Deer_Cr	0.711	CVFall-Mokelun	0.154	CVFall-Mill_Cr	0.078	1
T085548	NR-CH-10-	NA	NA	Juv	6/10/10	0.295	CVFall-Mill_Cr	0.511	CVFall-Butte_C	0.265	CVFall-Deer_Cr	0.143	0
T085549	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.613	CVFall-Mokelun	0.204	CVFall-Mill_Cr	0.131	0

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T085550	NR-CH-10-	NA	NA	Juv	6/10/10	0.298	CVFall-Deer_Cr	0.525	CVFall-Mill_Cr	0.220	CVFall-Butte_C	0.126	1
T085551	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.652	CVFall-Mokelun	0.200	CVFall-Mill_Cr	0.080	0
T085552	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Butte_C	0.471	CVFall-Deer_Cr	0.242	CVFall-Mill_Cr	0.196	0
T085553	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Deer_Cr	0.635	CVFall-Mill_Cr	0.191	CVFall-Butte_C	0.096	0
T085554	NR-CH-10-	NA	NA	Juv	6/10/10	0.242	CVFall-Deer_Cr	0.584	CVFall-Butte_C	0.203	CVFall-Mill_Cr	0.148	0
T085555	NR-CH-10-	NA	NA	Juv	6/10/10	0.284	CVFall-Deer_Cr	0.451	CVFall-Mokelun	0.315	CVFall-Mill_Cr	0.136	0
T085556	NR-CH-10-	NA	NA	Juv	6/10/10	0.277	CVFall-Deer_Cr	0.624	CVFall-Mill_Cr	0.253	CVFall-Butte_C	0.095	1
T085557	NR-CH-10-	NA	NA	Juv	6/10/10	0.316	CVFall-Deer_Cr	0.714	CVFall-Mill_Cr	0.116	CVFall-Butte_C	0.104	0
T085558	NR-CH-10-	NA	NA	Juv	6/10/10	0.284	CVFall-Deer_Cr	0.659	CVFall-Butte_C	0.168	CVFall-Mill_Cr	0.081	0
T085559	NR-CH-10-	NA	NA	Juv	6/10/10	0.305	CVFall-Deer_Cr	0.434	CVFall-Mill_Cr	0.326	CVFall-Mokelun	0.121	0
T085560	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Deer_Cr	0.804	CVFall-Mill_Cr	0.086	CVFall-Butte_C	0.068	0
T085561	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.867	CVFall-Butte_C	0.088	CVFall-Mill_Cr	0.029	0
T085562	NR-CH-10-	NA	NA	Juv	6/10/10	0.319	CVFall-Deer_Cr	0.485	CVFall-Mill_Cr	0.283	CVFall-Butte_C	0.132	1
T085563	NR-CH-10-	NA	NA	Juv	6/10/10	0.287	CVFall-Deer_Cr	0.395	CVFall-Mokelun	0.254	CVFall-Butte_C	0.181	1
T085564	NR-CH-10-	NA	NA	Juv	6/10/10	0.305	CVFall-Deer_Cr	0.785	CVFall-Butte_C	0.106	CVFall-Mokelun	0.060	0
T085565	NR-CH-10-	NA	NA	Juv	6/10/10	0.263	CVFall-Deer_Cr	0.591	CVFall-Mill_Cr	0.204	CVFall-Butte_C	0.132	0
T085566	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.478	CVFall-Mokelun	0.211	CVFall-Mill_Cr	0.185	0
T085567	NR-CH-10-	NA	NA	Juv	6/10/10	0.245	CVFall-Mill_Cr	0.361	CVFall-Deer_Cr	0.231	CVFall-Butte_C	0.220	1
T085568	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Deer_Cr	0.506	CVFall-Butte_C	0.349	CVFall-Mokelun	0.094	0
T085569	NR-CH-10-	NA	NA	Juv	6/10/10	0.242	CVFall-Deer_Cr	0.818	CVFall-Butte_C	0.083	CVFall-Mill_Cr	0.057	0
T085570	NR-CH-10-	NA	NA	Juv	6/10/10	0.245	CVFall-Deer_Cr	0.340	CVFall-Mokelun	0.318	CVFall-Mill_Cr	0.193	1
T085571	NR-CH-10-	NA	NA	Juv	6/10/10	0.301	CVFall-Deer_Cr	0.853	CVFall-Butte_C	0.070	CVFall-Mill_Cr	0.048	2
T085572	NR-CH-10-	NA	NA	Juv	6/10/10	0.242	CVFall-Deer_Cr	0.715	CVFall-Mill_Cr	0.156	CVFall-Butte_C	0.071	0
T085573	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Deer_Cr	0.386	CVFall-Mill_Cr	0.285	CVFall-Mokelun	0.205	0
T085574	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Mill_Cr	0.382	CVFall-Deer_Cr	0.326	CVFall-Butte_C	0.171	0
T085575	NR-CH-10-	NA	NA	Juv	6/10/10	0.316	CVFall-Mill_Cr	0.466	CVFall-Butte_C	0.229	CVFall-Deer_Cr	0.185	0
T085576	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Deer_Cr	0.563	CVFall-Mill_Cr	0.218	CVFall-Butte_C	0.134	0
T085577	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Deer_Cr	0.486	CVFall-Butte_C	0.281	CVFall-Mokelun	0.152	0
T085578	NR-CH-10-	NA	NA	Juv	6/10/10	0.316	CVFall-Deer_Cr	0.685	CVFall-Mokelun	0.137	CVFall-Butte_C	0.119	0
T085579	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Deer_Cr	0.609	CVFall-Mokelun	0.145	CVFall-Mill_Cr	0.136	0
T085580	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Deer_Cr	0.522	CVFall-Mill_Cr	0.235	CVFall-Mokelun	0.150	0
T085581	NR-CH-10-	NA	NA	Juv	6/10/10	0.232	CVFall-Deer_Cr	0.441	CVFall-Mill_Cr	0.265	CVFall-Butte_C	0.153	0
T085582	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Mokelur	0.599	CVFall-Deer_Cr	0.304	CVFall-Butte_C	0.051	0
T085584	NR-CH-10-	NA	NA	Juv	6/10/10	0.316	CVFall-Deer_Cr	0.876	CVFall-Butte_C	0.064	CVFall-Mill_Cr	0.042	0
T085585	NR-CH-10-	NA	NA	Juv	6/10/10	0.283	CVFall-Deer_Cr	0.656	CVFall-Mokelun	0.209	CVFall-Butte_C	0.114	3

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T085586	NR-CH-10-	NA	NA	Juv	6/10/10	0.323	CVFall-Deer_Cr	0.855	CVFall-Butte_C	0.099	CVFall-Mill_Cr	0.027	2
T085587	NR-CH-10-	NA	NA	Juv	6/10/10	0.168	CVFall-Deer_Cr	0.727	CVFall-Mokelun	0.125	CVFall-Mill_Cr	0.081	0
T085588	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.687	CVFall-Mokelun	0.140	CVFall-Mill_Cr	0.114	0
T085589	NR-CH-10-	NA	NA	Juv	6/10/10	0.232	CVFall-Deer_Cr	0.719	CVFall-Mill_Cr	0.155	CVFall-Butte_C	0.097	0
T085590	NR-CH-10-	NA	NA	Juv	6/10/10	0.255	CVFall-Mill_Cr	0.464	CVFall-Deer_Cr	0.325	CVFall-Butte_C	0.173	1
T085591	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Deer_Cr	0.742	CVFall-Mokelun	0.163	CVFall-Butte_C	0.089	0
T085592	NR-CH-10-	NA	NA	Juv	6/10/10	0.234	CVFall-Mill_Cr	0.437	CVFall-Deer_Cr	0.373	CVFall-Butte_C	0.126	1
T085593	NR-CH-10-	NA	NA	Juv	6/10/10	0.319	CVFall-Mill_Cr	0.392	CVFall-Deer_Cr	0.372	CVFall-Butte_C	0.183	1
T085594	NR-CH-10-	NA	NA	Juv	6/10/10	0.221	CVFall-Deer_Cr	0.484	CVFall-Butte_C	0.246	CVFall-Mill_Cr	0.236	0
T085595	NR-CH-10-	NA	NA	Juv	6/10/10	0.358	CVFall-Deer_Cr	0.416	CVFall-Mokelun	0.301	CVFall-Butte_C	0.195	0
T085596	NR-CH-10-	NA	NA	Juv	6/10/10	0.309	CVFall-Deer_Cr	0.381	CVFall-Butte_C	0.278	CVFall-Mokelun	0.230	1
T085597	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Deer_Cr	0.785	CVFall-Butte_C	0.080	CVFall-Mill_Cr	0.080	0
T085598	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Butte_C	0.660	CVFall-Mokelun	0.140	CVFall-Mill_Cr	0.137	0
T085599	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Butte_C	0.536	CVFall-Mokelun	0.330	CVFall-Mill_Cr	0.100	0
T085600	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Mokelur	0.578	CVFall-Butte_C	0.351	CVFall-Deer_Cr	0.045	0
T085601	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Mokelur	0.489	CVFall-Deer_Cr	0.328	CVFall-Butte_C	0.177	0
T085602	NR-CH-10-	NA	NA	Juv	6/10/10	0.362	CVFall-Mokelur	0.624	CVFall-Butte_C	0.242	CVFall-Mill_Cr	0.106	1
T085603	NR-CH-10-	NA	NA	Juv	6/10/10	0.362	CVFall-Mokelur	0.431	CVFall-Butte_C	0.327	CVFall-Mill_Cr	0.125	1
T085604	NR-CH-10-	NA	NA	Juv	6/10/10	0.484	CVFall-Mokelur	0.487	CVFall-Butte_C	0.326	CVFall-Deer_Cr	0.152	0
T085605	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Deer_Cr	0.709	CVFall-Butte_C	0.175	CVFall-Mokelun	0.103	0
T085606	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Deer_Cr	0.644	CVFall-Mokelun	0.177	CVFall-Butte_C	0.165	0
T085607	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.904	CVFall-Butte_C	0.060	CVFall-Deer_Cr	0.034	0
T085608	NR-CH-10-	NA	NA	Juv	6/10/10	0.337	CVFall-Mokelur	0.600	CVFall-Butte_C	0.339	CVFall-Deer_Cr	0.057	0
T085609	NR-CH-10-	NA	NA	Juv	6/10/10	0.453	CVFall-Mokelur	0.732	CVFall-Deer_Cr	0.132	CVFall-Butte_C	0.086	0
T085610	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Mokelur	0.855	CVFall-Butte_C	0.103	CVFall-Deer_Cr	0.039	0
T085611	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.864	CVFall-Butte_C	0.113	CVFall-Deer_Cr	0.016	0
T085612	NR-CH-10-	NA	NA	Juv	6/10/10	0.379	CVFall-Butte_C	0.402	CVFall-Mokelun	0.385	CVFall-Deer_Cr	0.202	0
T085613	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Butte_C	0.417	CVFall-Mokelun	0.383	CVFall-Deer_Cr	0.186	0
T085614	NR-CH-10-	NA	NA	Juv	6/10/10	0.263	CVFall-Butte_C	0.347	CVFall-Mokelun	0.325	CVFall-Mill_Cr	0.263	0
T085615	NR-CH-10-	NA	NA	Juv	6/10/10	0.266	CVFall-Mokelur	0.863	CVFall-Butte_C	0.092	CVFall-Mill_Cr	0.026	1
T085616	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Mokelur	0.605	CVFall-Deer_Cr	0.253	CVFall-Butte_C	0.138	0
T085617	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Mokelur	0.623	CVFall-Butte_C	0.250	CVFall-Mill_Cr	0.096	0
T085618	NR-CH-10-	NA	NA	Juv	6/10/10	0.340	CVFall-Butte_C	0.382	CVFall-Mokelun	0.321	CVFall-Mill_Cr	0.155	1
T085619	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Mokelur	0.515	CVFall-Butte_C	0.312	CVFall-Deer_Cr	0.169	0
T085620	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Mokelur	0.551	CVFall-Butte_C	0.229	CVFall-Deer_Cr	0.184	0

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T085621	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.686	CVFall-Deer_Cr	0.221	CVFall-Butte_C	0.091	0
T085622	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Mokelur	0.815	CVFall-Butte_C	0.140	CVFall-Mill_Cr	0.026	0
T085623	NR-CH-10-	NA	NA	Juv	6/10/10	0.326	CVFall-Mokelur	0.791	CVFall-Butte_C	0.165	CVFall-Mill_Cr	0.027	0
T085624	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Butte_C	0.480	CVFall-Mokelun	0.290	CVFall-Deer_Cr	0.212	0
T085625	NR-CH-10-	NA	NA	Juv	6/10/10	0.358	CVFall-Mokelur	0.333	CVFall-Mill_Cr	0.287	CVFall-Butte_C	0.187	0
T085626	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Mokelur	0.945	CVFall-Butte_C	0.034	CVFall-Battle_C	0.009	0
T085627	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Mokelur	0.658	CVFall-Butte_C	0.150	CVFall-Mill_Cr	0.123	0
T085628	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Butte_C	0.425	CVFall-Mokelun	0.289	CVFall-Deer_Cr	0.262	0
T085629	NR-CH-10-	NA	NA	Juv	6/10/10	0.274	CVFall-Mokelur	0.527	CVFall-Butte_C	0.225	CVFall-Deer_Cr	0.143	0
T085630	NR-CH-10-	NA	NA	Juv	6/10/10	0.442	CVFall-Butte_C	0.504	CVFall-Mokelun	0.258	CVFall-Deer_Cr	0.186	0
T085632	NR-CH-10-	NA	NA	Juv	6/10/10	0.319	CVFall-Mokelur	0.711	CVFall-Mill_Cr	0.176	CVFall-Butte_C	0.089	1
T085633	NR-CH-10-	NA	NA	Juv	6/10/10	0.436	CVFall-Mokelur	0.866	CVFall-Butte_C	0.115	CVFall-Mill_Cr	0.010	1
T085634	NR-CH-10-	NA	NA	Juv	6/10/10	0.421	CVFall-Mokelur	0.835	CVFall-Deer_Cr	0.089	CVFall-Butte_C	0.071	0
T085635	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Mill_Cr	0.353	CVFall-Mokelun	0.301	CVFall-Battle_C	0.192	0
T085636	NR-CH-10-	NA	NA	Juv	6/10/10	0.436	CVFall-Mokelur	0.587	CVFall-Butte_C	0.289	CVFall-Mill_Cr	0.075	1
T085637	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Butte_C	0.449	CVFall-Mill_Cr	0.211	CVFall-Mokelun	0.159	0
T085638	NR-CH-10-	NA	NA	Juv	6/10/10	0.389	CVFall-Mokelur	0.946	CVFall-Butte_C	0.049	CVFall-Deer_Cr	0.003	0
T085639	NR-CH-10-	NA	NA	Juv	6/10/10	0.442	CVFall-Mokelur	0.605	CVFall-Butte_C	0.336	CVFall-Deer_Cr	0.038	0
T085640	NR-CH-10-	NA	NA	Juv	6/10/10	0.253	CVFall-Butte_C	0.464	CVFall-Mokelun	0.314	CVFall-Mill_Cr	0.115	0
T085641	NR-CH-10-	NA	NA	Juv	6/10/10	0.442	CVFall-Mokelur	0.631	CVFall-Butte_C	0.280	CVFall-Deer_Cr	0.082	0
T085642	NR-CH-10-	NA	NA	Juv	6/10/10	0.372	CVFall-Mokelur	0.663	CVFall-Butte_C	0.243	CVFall-Mill_Cr	0.051	1
T085643	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Butte_C	0.464	CVFall-Mokelun	0.425	CVFall-Deer_Cr	0.097	0
T085644	NR-CH-10-	NA	NA	Juv	6/10/10	0.411	CVFall-Butte_C	0.316	CVFall-Mill_Cr	0.246	CVFall-Deer_Cr	0.195	0
T085645	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.905	CVFall-Butte_C	0.067	CVFall-Deer_Cr	0.026	0
T085646	NR-CH-10-	NA	NA	Juv	6/10/10	0.394	CVFall-Butte_C	0.378	CVFall-Mokelun	0.291	CVFall-Mill_Cr	0.211	1
T085647	NR-CH-10-	NA	NA	Juv	6/10/10	0.400	CVFall-Mokelur	0.397	CVFall-Mill_Cr	0.332	CVFall-Butte_C	0.195	0
T085648	NR-CH-10-	NA	NA	Juv	6/10/10	0.319	CVFall-Mokelur	0.634	CVFall-Mill_Cr	0.220	CVFall-Butte_C	0.060	1
T085649	NR-CH-10-	NA	NA	Juv	6/10/10	0.432	CVFall-Deer_Cr	0.422	CVFall-Butte_C	0.264	CVFall-Mokelun	0.171	0
T085650	NR-CH-10-	NA	NA	Juv	6/10/10	0.368	CVFall-Butte_C	0.714	CVFall-Deer_Cr	0.138	CVFall-Mokelun	0.114	0
T085651	NR-CH-10-	NA	NA	Juv	6/10/10	0.484	CVFall-Butte_C	0.493	CVFall-Mokelun	0.418	CVFall-Deer_Cr	0.073	0
T085652	NR-CH-10-	NA	NA	Juv	6/10/10	0.319	CVFall-Mokelur	0.636	CVFall-Butte_C	0.207	CVFall-Deer_Cr	0.112	1
T085653	NR-CH-10-	NA	NA	Juv	6/10/10	0.263	CVFall-Mokelur	0.459	CVFall-Butte_C	0.438	CVFall-Mill_Cr	0.079	0
T085654	NR-CH-06C	NA	NA	Juv	6/10/10	0.221	CVFall-Deer_Cr	0.836	CVFall-Mokelun	0.079	CVFall-Mill_Cr	0.042	0
T085655	NR-CH-06C	NA	NA	Juv	6/10/10	0.263	CVFall-Mokelur	0.430	CVFall-Deer_Cr	0.338	CVFall-Mill_Cr	0.141	0
T085656	NR-CH-06C	NA	NA	Juv	6/10/10	0.298	CVFall-Mill_Cr	0.439	CVFall-Butte_C	0.309	CVFall-Deer_Cr	0.183	1

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T085657	NR-CH-06C	NA	NA	Juv	6/10/10	0.326	CVFall-Mill_Cr	0.722	CVFall-Butte_C	0.116	CVFall-Deer_Cr	0.080	0
T085658	NR-CH-06C	NA	NA	Juv	6/10/10	0.284	CVFall-Deer_Cr	0.852	CVFall-Butte_C	0.081	CVFall-Mokelun	0.049	0
T085659	NR-CH-06C	NA	NA	Juv	6/10/10	0.277	CVFall-Mill_Cr	0.452	CVFall-Deer_Cr	0.354	CVFall-Butte_C	0.165	1
T085660	NR-CH-06C	NA	NA	Juv	6/10/10	0.305	CVFall-Deer_Cr	0.570	CVFall-Mill_Cr	0.167	CVFall-Mokelun	0.142	0
T085661	NR-CH-06C	NA	NA	Juv	6/10/10	0.316	CVFall-Butte_C	0.363	CVFall-Butte_C	0.350	CVFall-Mill_Cr	0.204	0
T085662	NR-CH-06C	NA	NA	Juv	6/10/10	0.200	CVFall-Deer_Cr	0.743	CVFall-Mill_Cr	0.224	CVFall-Butte_C	0.020	0
T085663	NR-CH-06C	NA	NA	Juv	6/10/10	0.274	CVFall-Deer_Cr	0.484	CVFall-Mokelun	0.269	CVFall-Butte_C	0.221	0
T085664	NR-CH-06C	NA	NA	Juv	6/10/10	0.181	CVFall-Deer_Cr	0.585	CVFall-Mokelun	0.280	CVFall-Mill_Cr	0.070	1
T085665	NR-CH-06C	NA	NA	Juv	6/10/10	0.372	CVFall-Butte_C	0.492	CVFall-Battle_C	0.205	CVFall-Mill_Cr	0.129	1
T085666	NR-CH-05C	NA	NA	Juv	6/10/10	0.479	CVFall-Butte_C	0.602	CVFall-Mokelun	0.184	CVFall-Deer_Cr	0.101	1
T085667	NR-CH-05C	NA	NA	Juv	6/10/10	0.362	CVFall-Mokelur	0.531	CVFall-Butte_C	0.295	CVFall-Mill_Cr	0.140	1
T085668	NR-CH-05C	NA	NA	Juv	6/10/10	0.368	CVFall-Mokelur	0.946	CVFall-Butte_C	0.035	CVFall-Mill_Cr	0.013	0
T085669	NR-CH-05C	NA	NA	Juv	6/10/10	0.362	CVFall-Mokelur	0.590	CVFall-Butte_C	0.291	CVFall-Mill_Cr	0.093	1
T085670	NR-CH-05C	NA	NA	Juv	6/10/10	0.316	CVFall-Deer_Cr	0.686	CVFall-Mokelun	0.190	CVFall-Butte_C	0.096	0
T085671	NR-CH-05C	NA	NA	Juv	6/10/10	0.295	CVFall-Butte_C	0.448	CVFall-Mokelun	0.291	CVFall-Deer_Cr	0.151	0
T085672	SA-CHA-1C	NA	NA	Adult	10/25/11	0.337	CVFall-Butte_C	0.687	CVFall-Mill_Cr	0.141	CVFall-Mokelun	0.093	3
T085673	NR-CHA-1C	NA	NA	Adult	10/28/10	0.284	CVFall-Mill_Cr	0.713	CVFall-Butte_C	0.162	CVFall-Mokelun	0.096	0
T085674	NR-CHA-1C	620	F	Adult	11/16/10	0.231	CVFall-Butte_C	0.575	CVFall-Mill_Cr	0.236	CVFall-Deer_Cr	0.100	4
T085675	CH_skeletc	NA	NA	Adult	11/30/10	0.261	CVFall-Butte_C	0.577	CVFall-Mokelun	0.217	CVFall-Deer_Cr	0.152	3
T085676	CH_skeletc	NA	NA	Adult	11/30/10	0.224	CVFall-Mill_Cr	0.432	CVFall-Butte_C	0.247	CVFall-Deer_Cr	0.180	10
T085677	CH_skeletc	NA	NA	Adult	11/30/10	0.387	CVFall-Deer_Cr	0.351	CVFall-Mokelun	0.330	CVFall-Butte_C	0.274	2
T085678	CH_skeletc	NA	NA	Adult	11/30/10	0.340	CVFall-Butte_C	0.810	CVFall-Deer_Cr	0.094	CVFall-Mokelun	0.058	1
T085681	NR-CHA-1C	910	M	Adult	12/17/10	0.369	CVFall-Mokelur	0.671	CVFall-Butte_C	0.211	CVFall-Mill_Cr	0.075	11
T085682	NR-CHA-1C	750	F	Adult	12/17/10	0.400	CVFall-Mill_Cr	0.503	CVFall-Deer_Cr	0.406	CVFall-Butte_C	0.059	0
T085683	NR-CHA-1C	920	M	Adult	12/17/10	0.229	CVFall-Deer_Cr	0.641	CVFall-Butte_C	0.228	CVFall-Mill_Cr	0.086	12
T085684	NR-CHA-1C	1010	M	Adult	12/17/10	0.345	CVFall-Mokelur	0.838	CVFall-Deer_Cr	0.092	CVFall-Butte_C	0.060	11
T085685	NR-CHA-1C	780	F	Adult	12/17/10	0.368	CVFall-Mill_Cr	0.531	CVFall-Butte_C	0.317	CVFall-Mokelun	0.110	0
T085686	NR-CHA-1C	500	M	Adult	12/17/10	0.294	CVFall-Butte_C	0.560	CVFall-Mokelun	0.195	CVFall-Deer_Cr	0.184	10
T085687	NR-CHA-1C	640	M	Adult	12/17/10	0.333	CVFall-Butte_C	0.499	CVFall-Butte_C	0.338	CVFall-Mill_Cr	0.116	2
T085688	NR-CHA-1C	850	M	Adult	12/17/10	0.400	CVFall-Butte_C	0.824	CVFall-Mill_Cr	0.072	CVFall-Mokelun	0.071	0
T085689	NR-CHA-1C	680	F	Adult	12/17/10	0.295	CVFall-Deer_Cr	0.568	CVFall-Butte_C	0.249	CVFall-Mokelun	0.136	7
T085690	NR-CHA-1C	830	F	Adult	12/17/10	0.205	CVFall-Mokelur	0.448	CVFall-Butte_C	0.337	CVFall-Mill_Cr	0.107	12
T085691	NR-CHA-1C	730	F	Adult	12/17/10	0.411	CVFall-Deer_Cr	0.537	CVFall-Butte_C	0.218	CVFall-Mokelun	0.213	0
T085692	NR-CHA-1C	660	M	Adult	12/17/10	0.409	CVFall-Butte_C	0.417	CVFall-Deer_Cr	0.342	CVFall-Mill_Cr	0.198	2
T085693	NR-CHA-1C	680	M	Adult	12/17/10	0.337	CVFall-Butte_C	0.703	CVFall-Mokelun	0.155	CVFall-Deer_Cr	0.132	0

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T085694	NR-CHA-1C	760	F	Adult	12/17/10	0.218	CVFall-Deer_Ci	0.521	CVFall-Mill_Cr	0.233	CVFall-Butte_C	0.127	8
T085695	NR-CHA-1C	NA	M	Adult	12/17/10	0.290	CVFall-Mokelur	0.591	CVFall-Butte_C	0.193	CVFall-Mill_Cr	0.134	2
T085696	CH_skeletc	NA	NA	Adult	12/17/10	0.340	CVFall-Deer_Ci	0.764	CVFall-Mokelun	0.105	CVFall-Butte_C	0.095	1
T085697	CH_skeletc	NA	NA	Adult	12/17/10	0.247	CVFall-Butte_C	0.499	CVFall-Mokelun	0.310	CVFall-Mill_Cr	0.149	18
T085699	NR-CH-11-	NA	NA	Juv	4/6/11	0.415	CVFall-Mokelur	0.636	CVFall-Butte_C	0.209	CVFall-Deer_Cr	0.140	1
T085700	NR-CH-11-	NA	NA	Juv	4/6/11	0.347	CVFall-Mokelur	0.919	CVFall-Butte_C	0.055	CVFall-Deer_Cr	0.023	0
T085701	NR-CH-11-	NA	NA	Juv	4/6/11	0.362	CVFall-Mokelur	0.844	CVFall-Butte_C	0.116	CVFall-Deer_Cr	0.025	1
T085702	NR-CH-11-	NA	NA	Juv	4/7/11	0.263	CVFall-Butte_C	0.479	CVFall-Mokelun	0.422	CVFall-Deer_Cr	0.081	0
T085703	NR-CH-11-	NA	NA	Juv	4/7/11	0.347	CVFall-Mokelur	0.762	CVFall-Butte_C	0.209	CVFall-Deer_Cr	0.025	0
T085704	NR-CH-11-	NA	NA	Juv	4/7/11	0.347	CVFall-Mokelur	0.679	CVFall-Butte_C	0.239	CVFall-Deer_Cr	0.068	0
T085705	NR-Ch-11-	NA	NA	Juv	4/8/11	0.379	CVFall-Mokelur	0.457	CVFall-Butte_C	0.399	CVFall-Mill_Cr	0.076	0
T085706	NR-Ch-11-	NA	NA	Juv	4/8/11	0.263	CVFall-Mokelur	0.612	CVFall-Mill_Cr	0.195	CVFall-Deer_Cr	0.142	0
T085707	NR-Ch-11-	NA	NA	Juv	4/8/11	0.295	CVFall-Butte_C	0.839	CVFall-Mokelun	0.094	CVFall-Mill_Cr	0.039	0
T085708	NR-CH-11-	NA	NA	Juv	4/9/11	0.379	CVFall-Mokelur	0.607	CVFall-Deer_Cr	0.197	CVFall-Butte_C	0.193	0
T085709	NR-CH-11-	NA	NA	Juv	4/9/11	0.616	CVFall-Butte_C	0.533	CVFall-Mokelun	0.278	CVFall-Deer_Cr	0.153	22
T085710	NR-CH-11-	NA	NA	Juv	4/9/11	0.305	CVFall-Butte_C	0.641	CVFall-Deer_Cr	0.161	CVFall-Mill_Cr	0.158	0
T085711	NR-CH-11-	NA	NA	Juv	4/10/11	0.263	CVFall-Mokelur	0.405	CVFall-Butte_C	0.338	CVFall-Mill_Cr	0.150	0
T085712	NR-CH-11-	NA	NA	Juv	4/10/11	0.442	CVFall-Mokelur	0.587	CVFall-Butte_C	0.355	CVFall-Deer_Cr	0.042	0
T085713	NR-CH-11-	NA	NA	Juv	4/11/11	0.358	CVFall-Butte_C	0.721	CVFall-Mokelun	0.139	CVFall-Mill_Cr	0.087	0
T085714	NR-CH-11-	NA	NA	Juv	4/11/11	0.358	CVFall-Mokelur	0.533	CVFall-Mill_Cr	0.155	CVFall-Butte_C	0.115	0
T085715	NR-CH-11-	NA	NA	Juv	4/11/11	0.326	CVFall-Butte_C	0.397	CVFall-Mokelun	0.322	CVFall-Deer_Cr	0.144	0
T085716	NR-CH-11-	NA	NA	Juv	4/11/11	0.358	CVFall-Mokelur	0.689	CVFall-Butte_C	0.205	CVFall-Deer_Cr	0.061	0
T085717	NR-CH-11-	NA	NA	Juv	4/12/11	0.337	CVFall-Butte_C	0.605	CVFall-Mill_Cr	0.175	CVFall-Deer_Cr	0.125	0
T085718	NR-CH-11-	NA	NA	Juv	4/12/11	0.404	CVFall-Deer_Ci	0.557	CVFall-Mokelun	0.299	CVFall-Mill_Cr	0.083	1
T085719	NR-CH-11-	NA	NA	Juv	4/12/11	0.337	CVFall-Butte_C	0.546	CVFall-Mill_Cr	0.244	CVFall-Deer_Cr	0.099	0
T085720	NR-CH-11-	NA	NA	Juv	4/13/11	0.495	CVFall-Butte_C	0.453	CVFall-Mokelun	0.311	CVFall-Mill_Cr	0.130	0
T085721	NR-CH-11-	NA	NA	Juv	4/13/11	0.432	CVFall-Butte_C	0.509	CVFall-Mokelun	0.240	CVFall-Mill_Cr	0.174	0
T085722	NR-CH-11-	NA	NA	Juv	4/13/11	0.379	CVFall-Mokelur	0.862	CVFall-Butte_C	0.101	CVFall-Mill_Cr	0.022	0
T085723	NR-Ch-11-	NA	NA	Juv	4/14/11	0.344	CVFall-Mokelur	0.660	CVFall-Deer_Cr	0.166	CVFall-Butte_C	0.137	2
T085724	NR-Ch-11-	NA	NA	Juv	4/14/11	0.389	CVFall-Butte_C	0.814	CVFall-Mill_Cr	0.118	CVFall-Mokelun	0.043	0
T085725	NR-Ch-11-	NA	NA	Juv	4/14/11	0.337	CVFall-Mokelur	0.507	CVFall-Deer_Cr	0.382	CVFall-Butte_C	0.100	0
T085726	NR-CH-11-	NA	NA	Juv	4/15/11	0.379	CVFall-Butte_C	0.588	CVFall-Mokelun	0.220	CVFall-Deer_Cr	0.173	0
T086112	NR-CH-11-	NA	NA	Juv	4/15/11	0.305	CVFall-Butte_C	0.546	CVFall-Mill_Cr	0.209	CVFall-Mokelun	0.161	0
T086113	NR-CH-11-	NA	NA	Juv	4/15/11	0.362	CVFall-Butte_C	0.556	CVFall-Deer_Cr	0.280	CVFall-Mokelun	0.078	1
T086114	NR-CH-11-	NA	NA	Juv	4/16/11	0.316	CVFall-Deer_Ci	0.416	CVFall-Mokelun	0.315	CVFall-Butte_C	0.240	0

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T086115	NR-CH-11-	NA	NA	Juv	4/16/11	0.337	CVFall-Mokelur	0.541	CVFall-Butte_C	0.233	CVFall-Mill_Cr	0.181	0
T086116	NR-CH-11-	NA	NA	Juv	4/16/11	0.337	CVFall-Butte_C	0.427	CVFall-Deer_Cr	0.307	CVFall-Mokelun	0.206	0
T086117	NR-CH-11-	NA	NA	Juv	4/17/11	0.389	CVFall-Mokelur	0.426	CVFall-Butte_C	0.409	CVFall-Deer_Cr	0.156	0
T086118	NR-CH-11-	NA	NA	Juv	4/17/11	0.379	CVFall-Deer_Cr	0.670	CVFall-Butte_C	0.179	CVFall-Mokelun	0.115	0
T086119	NR-CH-11-	NA	NA	Juv	4/17/11	0.326	CVFall-Mokelur	0.488	CVFall-Butte_C	0.422	CVFall-Mill_Cr	0.065	0
T086120	NR-CH-11-	NA	NA	Juv	4/18/11	0.326	CVFall-Butte_C	0.399	CVFall-Mokelun	0.352	CVFall-Deer_Cr	0.147	0
T086121	NR-CH-11-	NA	NA	Juv	4/18/11	0.426	CVFall-Butte_C	0.555	CVFall-Mokelun	0.337	CVFall-Deer_Cr	0.053	1
T086122	NR-CH-11-	NA	NA	Juv	4/18/11	0.351	CVFall-Mokelur	0.624	CVFall-Butte_C	0.272	CVFall-Deer_Cr	0.091	1
T086123	NR-CH-11-	NA	NA	Juv	4/19/11	0.326	CVFall-Butte_C	0.773	CVFall-Mokelun	0.134	CVFall-Deer_Cr	0.054	0
T086124	NR-CH-11-	NA	NA	Juv	4/19/11	0.284	CVFall-Mill_Cr	0.365	CVFall-Butte_C	0.224	CVFall-Deer_Cr	0.220	0
T086125	NR-CH-11-	NA	NA	Juv	4/19/11	0.379	CVFall-Mokelur	0.724	CVFall-Butte_C	0.215	CVFall-Battle_C	0.030	0
T086126	NR-CH-11-	NA	NA	Juv	4/20/11	0.347	CVFall-Mokelur	0.648	CVFall-Deer_Cr	0.234	CVFall-Butte_C	0.084	0
T086127	NR-CH-11-	NA	NA	Juv	4/20/11	0.347	CVFall-Deer_Cr	0.592	CVFall-Mokelun	0.218	CVFall-Butte_C	0.183	0
T086128	NR-CH-11-	NA	NA	Juv	4/20/11	0.372	CVFall-Mokelur	0.751	CVFall-Butte_C	0.145	CVFall-Deer_Cr	0.062	1
T086129	NR-CH-11-	NA	NA	Juv	4/21/11	0.372	CVFall-Mokelur	0.723	CVFall-Butte_C	0.203	CVFall-Mill_Cr	0.054	1
T086130	NR-CH-11-	NA	NA	Juv	4/21/11	0.326	CVFall-Butte_C	0.390	CVFall-Mill_Cr	0.383	CVFall-Mokelun	0.125	0
T086131	NR-CH-11-	NA	NA	Juv	4/21/11	0.316	CVFall-Butte_C	0.624	CVFall-Mokelun	0.227	CVFall-Deer_Cr	0.111	0
T086132	NR-CH-11-	NA	NA	Juv	4/22/11	0.432	CVFall-Mokelur	0.447	CVFall-Butte_C	0.420	CVFall-Mill_Cr	0.103	0
T086133	NR-CH-11-	NA	NA	Juv	4/22/11	0.442	CVFall-Butte_C	0.411	CVFall-Mokelun	0.397	CVFall-Deer_Cr	0.111	0
T086134	NR-CH-11-	NA	NA	Juv	4/22/11	0.421	CVFall-Butte_C	0.472	CVFall-Mokelun	0.389	CVFall-Deer_Cr	0.103	0
T086135	NR-CH-11-	NA	NA	Juv	4/23/11	0.379	CVFall-Mokelur	0.484	CVFall-Deer_Cr	0.278	CVFall-Butte_C	0.214	0
T086136	NR-CH-11-	NA	NA	Juv	4/23/11	0.389	CVFall-Mokelur	0.861	CVFall-Deer_Cr	0.059	CVFall-Mill_Cr	0.043	0
T086137	NR-CH-11-	NA	NA	Juv	4/23/11	0.337	CVFall-Butte_C	0.347	CVFall-Deer_Cr	0.323	CVFall-Mokelun	0.220	0
T086138	NR-CH-11-	NA	NA	Juv	4/24/11	0.368	CVFall-Butte_C	0.499	CVFall-Mokelun	0.485	CVFall-Deer_Cr	0.013	0
T086139	NR-CH-11-	NA	NA	Juv	4/24/11	0.295	CVFall-Deer_Cr	0.517	CVFall-Butte_C	0.404	CVFall-Mokelun	0.059	0
T086140	NR-CH-11-	NA	NA	Juv	4/24/11	0.389	CVFall-Mokelur	0.559	CVFall-Butte_C	0.347	CVFall-Deer_Cr	0.083	0
T086141	NR-CH-11-	NA	NA	Juv	4/25/11	0.404	CVFall-Butte_C	0.711	CVFall-Mokelun	0.192	CVFall-Mill_Cr	0.049	1
T086142	NR-CH-11-	NA	NA	Juv	4/25/11	0.432	CVFall-Mokelur	0.773	CVFall-Butte_C	0.140	CVFall-Deer_Cr	0.077	0
T086143	NR-CH-11-	NA	NA	Juv	4/25/11	0.358	CVFall-Mokelur	0.533	CVFall-Deer_Cr	0.271	CVFall-Butte_C	0.150	0
T086144	NR-CH-11-	NA	NA	Juv	4/26/11	0.389	CVFall-Mokelur	0.573	CVFall-Butte_C	0.362	CVFall-Deer_Cr	0.038	0
T086145	NR-CH-11-	NA	NA	Juv	4/26/11	0.379	CVFall-Butte_C	0.532	CVFall-Mokelun	0.252	CVFall-Mill_Cr	0.141	0
T086146	NR-CH-11-	NA	NA	Juv	4/26/11	0.305	CVFall-Mokelur	0.424	CVFall-Butte_C	0.352	CVFall-Deer_Cr	0.162	0
T086147	NR-CH-11-	NA	NA	Juv	4/27/11	0.389	CVFall-Deer_Cr	0.385	CVFall-Mokelun	0.327	CVFall-Butte_C	0.222	0
T086148	NR-CH-11-	NA	NA	Juv	4/27/11	0.337	CVFall-Mokelur	0.895	CVFall-Butte_C	0.080	CVFall-Deer_Cr	0.017	0
T086149	NR-CH-11-	NA	NA	Juv	4/27/11	0.347	CVFall-Mokelur	0.421	CVFall-Mill_Cr	0.302	CVFall-Butte_C	0.259	0

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T086150	NR-CH-11-	NA	NA	Juv	4/28/11	0.453	CVFall-Mokelur	0.496	CVFall-Butte_C	0.339	CVFall-Deer_Cr	0.108	0
T086151	NR-CH-11-	NA	NA	Juv	4/28/11	0.379	CVFall-Butte_C	0.515	CVFall-Mokelun	0.271	CVFall-Deer_Cr	0.162	0
T086152	NR-CH-11-	NA	NA	Juv	4/28/11	0.411	CVFall-Deer_Cr	0.603	CVFall-Mokelun	0.254	CVFall-Butte_C	0.125	0
T086153	NR-CH-11-	NA	NA	Juv	4/29/11	0.404	CVFall-Mokelur	0.525	CVFall-Butte_C	0.272	CVFall-Mill_Cr	0.170	1
T086154	NR-CH-11-	NA	NA	Juv	4/29/11	0.337	CVFall-Mill_Cr	0.586	CVFall-Butte_C	0.333	CVFall-Mokelun	0.047	0
T086155	NR-CH-11-	NA	NA	Juv	4/29/11	0.411	CVFall-Butte_C	0.668	CVFall-Mill_Cr	0.131	CVFall-Mokelun	0.108	0
T086156	NR-CH-11-	NA	NA	Juv	4/30/11	0.347	CVFall-Butte_C	0.498	CVFall-Mokelun	0.356	CVFall-Deer_Cr	0.123	0
T086157	NR-CH-11-	NA	NA	Juv	4/30/11	0.295	CVFall-Mokelur	0.660	CVFall-Butte_C	0.247	CVFall-Deer_Cr	0.063	0
T086158	NR-CH-11-	NA	NA	Juv	4/30/11	0.368	CVFall-Deer_Cr	0.512	CVFall-Butte_C	0.329	CVFall-Mokelun	0.104	0
T086160	NR-CH-11-	NA	NA	Juv	5/1/11	0.316	CVFall-Mill_Cr	0.572	CVFall-Mokelun	0.234	CVFall-Butte_C	0.156	0
T086161	NR-CH-11-	NA	NA	Juv	5/1/11	0.347	CVFall-Butte_C	0.527	CVFall-Mokelun	0.297	CVFall-Mill_Cr	0.114	0
T086162	NR-CH-11-	NA	NA	Juv	5/1/11	0.409	CVFall-Butte_C	0.711	CVFall-Mokelun	0.128	CVFall-Deer_Cr	0.094	2
T086163	NR-CH-11-	NA	NA	Juv	5/2/11	0.415	CVFall-Mokelur	0.436	CVFall-Butte_C	0.407	CVFall-Deer_Cr	0.105	1
T086164	NR-CH-11-	NA	NA	Juv	5/2/11	0.400	CVFall-Butte_C	0.388	CVFall-Mill_Cr	0.270	CVFall-Mokelun	0.227	0
T086165	NR-CH-11-	NA	NA	Juv	5/2/11	0.347	CVFall-Butte_C	0.619	CVFall-Mill_Cr	0.150	CVFall-Mokelun	0.099	0
T086166	NR-CH-11-	NA	NA	Juv	5/3/11	0.411	CVFall-Butte_C	0.523	CVFall-Mokelun	0.245	CVFall-Mill_Cr	0.118	0
T086167	NR-CH-11-	NA	NA	Juv	5/3/11	0.337	CVFall-Mokelur	0.438	CVFall-Deer_Cr	0.255	CVFall-Butte_C	0.218	0
T086168	NR-CH-11-	NA	NA	Juv	5/3/11	0.400	CVFall-Mokelur	0.465	CVFall-Butte_C	0.347	CVFall-Mill_Cr	0.128	0
T086169	NR-CH-11-	NA	NA	Juv	5/4/11	0.400	CVFall-Mokelur	0.796	CVFall-Butte_C	0.172	CVFall-Mill_Cr	0.025	0
T086170	NR-CH-11-	NA	NA	Juv	5/4/11	0.337	CVFall-Butte_C	0.508	CVFall-Mill_Cr	0.213	CVFall-Mokelun	0.148	0
T086171	NR-CH-11-	NA	NA	Juv	5/4/11	0.415	CVFall-Butte_C	0.643	CVFall-Deer_Cr	0.214	CVFall-Mokelun	0.114	1
T086172	NR-CH-11-	NA	NA	Juv	5/5/11	0.379	CVFall-Mokelur	0.684	CVFall-Butte_C	0.190	CVFall-Deer_Cr	0.075	0
T086173	NR-CH-11-	NA	NA	Juv	5/5/11	0.389	CVFall-Mokelur	0.445	CVFall-Butte_C	0.355	CVFall-Deer_Cr	0.188	0
T086174	NR-CH-11-	NA	NA	Juv	5/5/11	0.358	CVFall-Deer_Cr	0.673	CVFall-Butte_C	0.208	CVFall-Mokelun	0.071	0
T086175	NR-CH-11-	NA	NA	Juv	5/6/11	0.326	CVFall-Butte_C	0.695	CVFall-Mokelun	0.223	CVFall-Mill_Cr	0.058	0
T086176	NR-CH-11-	NA	NA	Juv	5/6/11	0.432	CVFall-Mokelur	0.708	CVFall-Deer_Cr	0.199	CVFall-Butte_C	0.081	0
T086177	NR-CH-11-	NA	NA	Juv	5/6/11	0.305	CVFall-Butte_C	0.468	CVFall-Mokelun	0.323	CVFall-Mill_Cr	0.164	0
T086178	NR-CH-11-	NA	NA	Juv	5/7/11	0.316	CVFall-Butte_C	0.608	CVFall-Mokelun	0.257	CVFall-Deer_Cr	0.108	0
T086179	NR-CH-11-	NA	NA	Juv	5/7/11	0.326	CVFall-Butte_C	0.559	CVFall-Deer_Cr	0.144	CVFall-Battle_C	0.102	0
T086180	NR-CH-11-	NA	NA	Juv	5/7/11	0.389	CVFall-Butte_C	0.720	CVFall-Mokelun	0.192	CVFall-Mill_Cr	0.049	0
T086181	NR-CH-11-	NA	NA	Juv	5/8/11	0.474	CVFall-Mokelur	0.364	CVFall-Butte_C	0.332	CVFall-Deer_Cr	0.290	0
T086182	NR-CH-11-	NA	NA	Juv	5/8/11	0.358	CVFall-Mokelur	0.564	CVFall-Butte_C	0.221	CVFall-Deer_Cr	0.202	0
T086183	NR-CH-11-	NA	NA	Juv	5/8/11	0.330	CVFall-Mokelur	0.547	CVFall-Butte_C	0.235	CVFall-Mill_Cr	0.170	1
T086184	NR-CH-11-	NA	NA	Juv	5/9/11	0.442	CVFall-Butte_C	0.539	CVFall-Mokelun	0.309	CVFall-Deer_Cr	0.129	0
T086185	NR-CH-11-	NA	NA	Juv	5/9/11	0.347	CVFall-Butte_C	0.496	CVFall-Mokelun	0.340	CVFall-Deer_Cr	0.082	0

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T086186	NR-CH-11-	NA	NA	Juv	5/9/11	0.383	CVFall-Butte_C	0.592	CVFall-Mokelun	0.321	CVFall-Mill_Cr	0.073	1
T086187	NR-CH-11-	NA	NA	Juv	5/10/11	0.340	CVFall-Mokelur	0.795	CVFall-Butte_C	0.164	CVFall-Mill_Cr	0.025	1
T086188	NR-CH-11-	NA	NA	Juv	5/10/11	0.389	CVFall-Butte_C	0.606	CVFall-Mill_Cr	0.185	CVFall-Deer_Cr	0.143	0
T086189	NR-CH-11-	NA	NA	Juv	5/10/11	0.421	CVFall-Mokelur	0.514	CVFall-Butte_C	0.315	CVFall-Mill_Cr	0.089	0
T086190	NR-CH-11-	NA	NA	Juv	5/11/11	0.337	CVFall-Butte_C	0.408	CVFall-Deer_Cr	0.291	CVFall-Mokelun	0.290	0
T086191	NR-CH-11-	NA	NA	Juv	5/11/11	0.442	CVFall-Mokelur	0.882	CVFall-Butte_C	0.067	CVFall-Mill_Cr	0.037	0
T086192	NR-CH-11-	NA	NA	Juv	5/11/11	0.421	CVFall-Mokelur	0.530	CVFall-Butte_C	0.365	CVFall-Mill_Cr	0.070	0
T086193	NR-CH-11-	NA	NA	Juv	5/12/11	0.400	CVFall-Butte_C	0.399	CVFall-Deer_Cr	0.326	CVFall-Mill_Cr	0.216	0
T086194	NR-CH-11-	NA	NA	Juv	5/12/11	0.330	CVFall-Butte_C	0.810	CVFall-Mill_Cr	0.131	CVFall-Deer_Cr	0.040	1
T086195	NR-CH-11-	NA	NA	Juv	5/12/11	0.316	CVFall-Butte_C	0.513	CVFall-Mill_Cr	0.230	CVFall-Mokelun	0.199	0
T086196	NR-CH-11-	NA	NA	Juv	5/13/11	0.284	CVFall-Deer_Cr	0.452	CVFall-Butte_C	0.334	CVFall-Mokelun	0.189	0
T086197	NR-CH-11-	NA	NA	Juv	5/13/11	0.411	CVFall-Mokelur	0.642	CVFall-Mill_Cr	0.227	CVFall-Butte_C	0.123	0
T086198	NR-CH-11-	NA	NA	Juv	5/13/11	0.298	CVFall-Mokelur	0.469	CVFall-Butte_C	0.292	CVFall-Mill_Cr	0.182	1
T086199	NR-CH-11-	NA	NA	Juv	5/14/11	0.284	CVFall-Mokelur	0.769	CVFall-Butte_C	0.106	CVFall-Deer_Cr	0.084	0
T086200	NR-CH-11-	NA	NA	Juv	5/14/11	0.421	CVFall-Mill_Cr	0.318	CVFall-Mokelun	0.243	CVFall-Butte_C	0.235	0
T086201	NR-CH-11-	NA	NA	Juv	5/14/11	0.326	CVFall-Mokelur	0.464	CVFall-Mill_Cr	0.254	CVFall-Butte_C	0.254	0
T086202	NR-CH-11-	NA	NA	Juv	5/15/11	0.274	CVFall-Deer_Cr	0.494	CVFall-Mokelun	0.242	CVFall-Mill_Cr	0.181	0
T086203	NR-CH-11-	NA	NA	Juv	5/15/11	0.316	CVFall-Butte_C	0.557	CVFall-Mokelun	0.292	CVFall-Mill_Cr	0.109	0
T086204	NR-CH-11-	NA	NA	Juv	5/15/11	0.379	CVFall-Butte_C	0.561	CVFall-Mokelun	0.351	CVFall-Mill_Cr	0.047	0
T086205	NR-CH-11-	NA	NA	Juv	5/17/11	0.379	CVFall-Butte_C	0.586	CVFall-Mokelun	0.265	CVFall-Deer_Cr	0.093	0
T086206	NR-CH-11-	NA	NA	Juv	5/17/11	0.347	CVFall-Mokelur	0.874	CVFall-Butte_C	0.079	CVFall-Deer_Cr	0.023	0
T086400	NR-CH-11-	NA	NA	Juv	5/17/11	0.330	CVFall-Mill_Cr	0.342	CVFall-Deer_Cr	0.339	CVFall-Mokelun	0.164	1
T086401	NR-CH-11-	NA	NA	Juv	5/18/11	0.389	CVFall-Mokelur	0.484	CVFall-Butte_C	0.455	CVFall-Mill_Cr	0.041	0
T086402	NR-CH-11-	NA	NA	Juv	5/18/11	0.421	CVFall-Butte_C	0.422	CVFall-Mokelun	0.380	CVFall-Mill_Cr	0.171	0
T086403	NR-CH-11-	NA	NA	Juv	5/18/11	0.389	CVFall-Butte_C	0.509	CVFall-Mokelun	0.456	CVFall-Mill_Cr	0.019	0
T086404	NR-CH-11-	NA	NA	Juv	5/19/11	0.394	CVFall-Butte_C	0.550	CVFall-Mokelun	0.202	CVFall-Deer_Cr	0.183	1
T086405	NR-CH-11-	NA	NA	Juv	5/19/11	0.400	CVFall-Mill_Cr	0.789	CVFall-Butte_C	0.099	CVFall-Deer_Cr	0.084	0
T086406	NR-CH-11-	NA	NA	Juv	5/19/11	0.306	CVFall-Butte_C	0.387	CVFall-Mill_Cr	0.289	CVFall-Deer_Cr	0.241	23
T086407	NR-CH-11-	NA	NA	Juv	5/20/11	0.319	CVFall-Mokelur	0.687	CVFall-Butte_C	0.243	CVFall-Deer_Cr	0.042	1
T086408	NR-CH-11-	NA	NA	Juv	5/20/11	0.326	CVFall-Butte_C	0.428	CVFall-Mokelun	0.416	CVFall-Deer_Cr	0.085	0
T086409	NR-CH-11-	NA	NA	Juv	5/20/11	0.319	CVFall-Mokelur	0.430	CVFall-Butte_C	0.391	CVFall-Deer_Cr	0.156	1
T086410	NR-CH-11-	NA	NA	Juv	5/21/11	0.263	CVFall-Mokelur	0.419	CVFall-Butte_C	0.276	CVFall-Mill_Cr	0.142	0
T086411	NR-CH-11-	NA	NA	Juv	5/21/11	0.426	CVFall-Mill_Cr	0.517	CVFall-Butte_C	0.226	CVFall-Mokelun	0.102	1
T086412	NR-CH-11-	NA	NA	Juv	5/21/11	0.404	CVFall-Butte_C	0.468	CVFall-Mill_Cr	0.225	CVFall-Mokelun	0.183	1
T086413	NR-CH-11-	NA	NA	Juv	5/22/11	0.419	CVFall-Mokelur	0.741	CVFall-Deer_Cr	0.103	CVFall-Butte_C	0.100	2

Table 2: Sample metadata and details of the individual assignment analysis. iHz=Individual Heterozygosity; No. Miss Loci= The number of loci, out of 96, that did not yield usable genotypes.

T086414	NR-CH-11-	NA	NA	Juv	5/22/11	0.358	CVFall-Deer_Cr	0.408	CVFall-Butte_C	0.329	CVFall-Mill_Cr	0.147	0
T086415	NR-CH-11-	NA	NA	Juv	5/22/11	0.266	CVFall-Butte_C	0.507	CVFall-Deer_Cr	0.208	CVFall-Mokelun	0.197	1
T086416	NR-CH-11-	NA	NA	Juv	5/23/11	0.379	CVFall-Mokelun	0.395	CVFall-Mill_Cr	0.317	CVFall-Butte_C	0.281	0
T086417	NR-CH-11-	NA	NA	Juv	5/23/11	0.347	CVFall-Mokelun	0.495	CVFall-Butte_C	0.339	CVFall-Deer_Cr	0.120	0
T086418	NR-CH-11-	NA	NA	Juv	5/23/11	0.368	CVFall-Mokelun	0.318	CVFall-Deer_Cr	0.227	CVFall-Butte_C	0.225	0
T086419	NR-CH-11-	NA	NA	Juv	5/24/11	0.319	CVFall-Deer_Cr	0.634	CVFall-Mill_Cr	0.204	CVFall-Butte_C	0.125	1
T086420	NR-CH-11-	NA	NA	Juv	5/24/11	0.404	CVFall-Butte_C	0.431	CVFall-Deer_Cr	0.233	CVFall-Mokelun	0.219	1
T086421	NR-CH-11-	NA	NA	Juv	5/24/11	0.379	CVFall-Mokelun	0.539	CVFall-Butte_C	0.388	CVFall-Mill_Cr	0.048	0
T086422	NR-CH-11-	NA	NA	Juv	5/25/11	0.411	CVFall-Butte_C	0.678	CVFall-Mokelun	0.215	CVFall-Mill_Cr	0.077	0
T086423	NR-CH-11-	NA	NA	Juv	5/25/11	0.242	CVFall-Mokelun	0.371	CVFall-Butte_C	0.216	CVFall-Mill_Cr	0.173	0
T086424	NR-CH-11-	NA	NA	Juv	5/25/11	0.326	CVFall-Butte_C	0.340	CVFall-Mokelun	0.311	CVFall-Mill_Cr	0.197	0
T086425	NR-CH-11-	NA	NA	Juv	5/26/11	0.362	CVFall-Butte_C	0.686	CVFall-Mokelun	0.264	CVFall-Deer_Cr	0.036	1
T086426	NR-CH-11-	NA	NA	Juv	5/26/11	0.316	CVFall-Butte_C	0.540	CVFall-Mill_Cr	0.233	CVFall-Mokelun	0.206	0
T086427	NR-CH-11-	NA	NA	Juv	5/26/11	0.368	CVFall-Mill_Cr	0.528	CVFall-Butte_C	0.280	CVFall-Mokelun	0.089	0
T086428	NR-CH-11-	NA	NA	Juv	5/27/11	0.347	CVFall-Mokelun	0.548	CVFall-Butte_C	0.350	CVFall-Deer_Cr	0.061	0
T086429	NR-CH-11-	NA	NA	Juv	5/27/11	0.368	CVFall-Butte_C	0.453	CVFall-Deer_Cr	0.302	CVFall-Mokelun	0.156	0
T086430	NR-CH-11-	NA	NA	Juv	5/27/11	0.411	CVFall-Butte_C	0.373	CVFall-Mokelun	0.351	CVFall-Deer_Cr	0.255	0
T086431	NR-CH-11-	NA	NA	Juv	5/28/11	0.347	CVFall-Mokelun	0.300	CVFall-Mill_Cr	0.245	CVFall-Deer_Cr	0.236	0
T086432	NR-CH-11-	NA	NA	Juv	5/28/11	0.368	CVFall-Butte_C	0.593	CVFall-Mill_Cr	0.276	CVFall-Mokelun	0.109	0
T086433	NR-CH-11-	NA	NA	Juv	5/28/11	0.316	CVFall-Butte_C	0.415	CVFall-Mokelun	0.364	CVFall-Mill_Cr	0.190	0
T086434	NR-CH-11-	NA	NA	Juv	5/29/11	0.372	CVFall-Butte_C	0.702	CVFall-Mill_Cr	0.110	CVFall-Deer_Cr	0.103	1
T086435	NR-CH-11-	NA	NA	Juv	5/29/11	0.326	CVFall-Mill_Cr	0.468	CVFall-Butte_C	0.221	CVFall-Deer_Cr	0.134	0
T086436	NR-CH-11-	NA	NA	Juv	5/29/11	0.337	CVFall-Butte_C	0.645	CVFall-Mill_Cr	0.180	CVFall-Mokelun	0.116	0
T086437	NR-CH-11-	NA	NA	Juv	5/30/11	0.358	CVFall-Butte_C	0.527	CVFall-Mokelun	0.301	CVFall-Mill_Cr	0.135	0
T086438	NR-CH-11-	NA	NA	Juv	5/30/11	0.358	CVFall-Deer_Cr	0.616	CVFall-Mill_Cr	0.140	CVFall-Mokelun	0.119	0
T086439	NR-CH-11-	NA	NA	Juv	5/30/11	0.409	CVFall-Mokelun	0.445	CVFall-Deer_Cr	0.256	CVFall-Butte_C	0.150	2
T086440	NR-CH-11-	NA	NA	Juv	5/31/11	0.400	CVFall-Mokelun	0.546	CVFall-Butte_C	0.314	CVFall-Deer_Cr	0.103	0
T086441	NR-CH-11-	NA	NA	Juv	5/31/11	0.319	CVFall-Mokelun	0.605	CVFall-Butte_C	0.287	CVFall-Mill_Cr	0.098	1
T086442	NR-CH-11-	NA	NA	Juv	5/31/11	0.274	CVFall-Deer_Cr	0.758	CVFall-Mokelun	0.181	CVFall-Butte_C	0.056	0
T086443	NR-CH-11-	NA	NA	Juv	6/1/11	0.358	CVFall-Butte_C	0.510	CVFall-Mokelun	0.457	CVFall-Deer_Cr	0.027	0
T086444	NR-CH-11-	NA	NA	Juv	6/1/11	0.383	CVFall-Mokelun	0.705	CVFall-Butte_C	0.236	CVFall-Deer_Cr	0.056	1
T086445	NR-CH-11-	NA	NA	Juv	6/1/11	0.600	CVFall-Butte_C	0.571	CVFall-Mill_Cr	0.208	CVFall-Mokelun	0.180	20
T086446	NR-CH-11-	NA	NA	Juv	6/2/11	0.319	CVFall-Butte_C	0.379	CVFall-Mokelun	0.371	CVFall-Mill_Cr	0.146	1
T086448	NR-CH-11-	NA	NA	Juv	6/2/11	0.316	CVFall-Butte_C	0.515	CVFall-Mokelun	0.221	CVFall-Mill_Cr	0.150	0
T086449	NR-CH-11-	NA	NA	Juv	6/2/11	0.287	CVFall-Mokelun	0.737	CVFall-Butte_C	0.235	CVFall-Deer_Cr	0.027	1

Table 2: Sample metadata and details of the individual assignment analysis. iHz=Individual Heterozygosity; No. Miss Loci= The number of loci, out of 96, that did not yield usable genotypes.

T086450	NR-CH-11-	NA	NA	Juv	6/3/11	0.358	CVFall-Mill_Cr	0.430	CVFall-Butte_C	0.349	CVFall-Mokelun	0.182	0
T086451	NR-CH-11-	NA	NA	Juv	6/3/11	0.316	CVFall-Mokelun	0.749	CVFall-Butte_C	0.182	CVFall-Deer_Cr	0.064	0
T086452	NR-CH-11-	NA	NA	Juv	6/3/11	0.389	CVFall-Mokelun	0.968	CVFall-Butte_C	0.028	CVFall-Deer_Cr	0.003	0
T086453	NR-CH-11-	NA	NA	Juv	6/3/11	0.305	CVFall-Butte_C	0.394	CVFall-Mokelun	0.347	CVFall-Deer_Cr	0.137	0
T086454	NR-CH-11-	NA	NA	Juv	6/4/11	0.368	CVFall-Butte_C	0.786	CVFall-Mokelun	0.104	CVFall-Mill_Cr	0.056	0
T086455	NR-CH-11-	NA	NA	Juv	6/5/11	0.597	CVFall-Mokelun	0.553	CVFall-Butte_C	0.240	CVFall-Deer_Cr	0.143	28
T086456	NR-CH-11-	NA	NA	Juv	6/5/11	0.531	CVFall-Deer_Cr	0.456	CVFall-Butte_C	0.342	CVFall-Mokelun	0.180	31
T086457	NR-CH-11-	NA	NA	Juv	6/5/11	0.425	CVFall-Mokelun	0.459	CVFall-Butte_C	0.332	CVFall-Deer_Cr	0.200	8
T086458	NR-CH-11-	NA	NA	Juv	6/5/11	0.400	CVFall-Butte_C	0.599	CVFall-Mokelun	0.199	CVFall-Deer_Cr	0.154	25
T086459	NR-CH-11-	NA	NA	Juv	6/6/11	0.368	CVFall-Butte_C	0.629	CVFall-Mokelun	0.233	CVFall-Mill_Cr	0.071	0
T086460	NR-CH-11-	NA	NA	Juv	6/6/11	0.326	CVFall-Butte_C	0.464	CVFall-Deer_Cr	0.292	CVFall-Mokelun	0.148	0
T086461	NR-CH-11-	NA	NA	Juv	6/6/11	0.274	CVFall-Butte_C	0.359	CVFall-Mill_Cr	0.239	CVFall-Deer_Cr	0.237	0
T086462	NR-CH-11-	NA	NA	Juv	6/7/11	0.330	CVFall-Mokelun	0.636	CVFall-Butte_C	0.259	CVFall-Deer_Cr	0.070	1
T086463	NR-CH-11-	NA	NA	Juv	6/7/11	0.337	CVFall-Mokelun	0.373	CVFall-Butte_C	0.325	CVFall-Mill_Cr	0.196	0
T086464	NR-CH-11-	NA	NA	Juv	6/7/11	0.389	CVFall-Mill_Cr	0.766	CVFall-Butte_C	0.095	CVFall-Mokelun	0.076	0
T086465	NR-CH-11-	NA	NA	Juv	6/8/11	0.389	CVFall-Butte_C	0.572	CVFall-Mokelun	0.374	CVFall-Mill_Cr	0.026	0
T086466	NR-CH-11-	NA	NA	Juv	6/8/11	0.298	CVFall-Butte_C	0.621	CVFall-Deer_Cr	0.194	CVFall-Mokelun	0.179	1
T086467	NR-CH-11-	NA	NA	Juv	6/8/11	0.337	CVFall-Mill_Cr	0.403	CVFall-Mokelun	0.301	CVFall-Butte_C	0.265	0
T086468	NR-CH-11-	NA	NA	Juv	6/9/11	0.394	CVFall-Mokelun	0.600	CVFall-Butte_C	0.381	CVFall-Deer_Cr	0.012	1
T086469	NR-CH-11-	NA	NA	Juv	6/9/11	0.362	CVFall-Butte_C	0.554	CVFall-Mill_Cr	0.272	CVFall-Mokelun	0.154	1
T086470	NR-CH-11-	NA	NA	Juv	6/9/11	0.337	CVFall-Butte_C	0.614	CVFall-Deer_Cr	0.202	CVFall-Mill_Cr	0.100	0
T086471	NR-CH-11-	NA	NA	Juv	6/10/11	0.368	CVFall-Butte_C	0.320	CVFall-Deer_Cr	0.308	CVFall-Mill_Cr	0.238	0
T086472	NR-CH-11-	NA	NA	Juv	6/10/11	0.368	CVFall-Mokelun	0.514	CVFall-Butte_C	0.392	CVFall-Deer_Cr	0.045	0
T086473	NR-CH-11-	NA	NA	Juv	6/10/11	0.368	CVFall-Mokelun	0.515	CVFall-Butte_C	0.433	CVFall-Mill_Cr	0.028	0
T086474	NR-CH-11-	NA	NA	Juv	6/11/11	0.402	CVFall-Mokelun	0.569	CVFall-Butte_C	0.375	CVFall-Deer_Cr	0.041	3
T086475	NR-CH-11-	NA	NA	Juv	6/11/11	0.330	CVFall-Butte_C	0.473	CVFall-Mokelun	0.394	CVFall-Deer_Cr	0.108	1
T086476	NR-CH-11-	NA	NA	Juv	6/11/11	0.305	CVFall-Mokelun	0.429	CVFall-Butte_C	0.360	CVFall-Deer_Cr	0.204	0
T086477	NR-CH-11-	NA	NA	Juv	6/12/11	0.316	CVFall-Mokelun	0.382	CVFall-Butte_C	0.353	CVFall-Deer_Cr	0.234	0
T086478	NR-CH-11-	NA	NA	Juv	6/12/11	0.263	CVFall-Butte_C	0.445	CVFall-Deer_Cr	0.406	CVFall-Mokelun	0.120	0
T086479	NR-CH-11-	NA	NA	Juv	6/12/11	0.340	CVFall-Butte_C	0.464	CVFall-Mokelun	0.336	CVFall-Deer_Cr	0.178	1
T086480	NR-CH-11-	NA	NA	Juv	6/13/11	0.358	CVFall-Mokelun	0.556	CVFall-Butte_C	0.261	CVFall-Deer_Cr	0.171	0
T086481	NR-CH-11-	NA	NA	Juv	6/13/11	0.316	CVFall-Mokelun	0.656	CVFall-Butte_C	0.195	CVFall-Mill_Cr	0.077	0
T086482	NR-CH-11-	NA	NA	Juv	6/13/11	0.340	CVFall-Mokelun	0.715	CVFall-Butte_C	0.226	CVFall-Mill_Cr	0.039	1
T086483	NR-CH-11-	NA	NA	Juv	6/14/11	0.337	CVFall-Deer_Cr	0.633	CVFall-Butte_C	0.183	CVFall-Mokelun	0.108	0
T086484	NR-CH-11-	NA	NA	Juv	6/14/11	0.379	CVFall-Mokelun	0.740	CVFall-Butte_C	0.138	CVFall-Deer_Cr	0.109	0

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T086485	NR-CH-11-	NA	NA	Juv	6/14/11	0.330	CVFall-Mokelur	0.454	CVFall-Deer_Cr	0.406	CVFall-Butte_C	0.133	1
T086486	NR-CH-11-	NA	NA	Juv	6/15/11	0.322	CVFall-Mokelur	0.468	CVFall-Butte_C	0.296	CVFall-Deer_Cr	0.198	5
T086487	NR-CH-11-	NA	NA	Juv	6/15/11	0.379	CVFall-Butte_C	0.452	CVFall-Deer_Cr	0.295	CVFall-Mokelun	0.204	0
T086488	NR-CH-11-	NA	NA	Juv	6/15/11	0.362	CVFall-Mokelur	0.947	CVFall-Butte_C	0.041	CVFall-Deer_Cr	0.008	1
T086489	NR-CH-11-	NA	NA	Juv	6/16/11	0.330	CVFall-Butte_C	0.547	CVFall-Mokelun	0.387	CVFall-Deer_Cr	0.062	1
T086490	NR-CH-11-	NA	NA	Juv	6/16/11	0.340	CVFall-Butte_C	0.532	CVFall-Mokelun	0.335	CVFall-Mill_Cr	0.071	1
T086491	NR-CH-11-	NA	NA	Juv	6/16/11	0.376	CVFall-Mokelur	0.613	CVFall-Butte_C	0.218	CVFall-Deer_Cr	0.159	2
T086492	NR-CH-11-	NA	NA	Juv	6/17/11	0.368	CVFall-Deer_Cr	0.381	CVFall-Mokelun	0.325	CVFall-Butte_C	0.291	0
T086493	NR-CH-11-	NA	NA	Juv	6/17/11	0.330	CVFall-Butte_C	0.555	CVFall-Mokelun	0.388	CVFall-Deer_Cr	0.031	1
T086494	NR-CH-11-	NA	NA	Juv	6/17/11	0.197	CVFall-Butte_C	0.463	CVFall-Mokelun	0.328	CVFall-Deer_Cr	0.199	29

Coho n=1

T085456	NR-CH-10-	90	NA	Juv	4/30/10	0.043	CohoSp-Califor	1.000	CVSpring-Butte	0.000	CVSpring-Mill_C	0.000	25
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Bad Data n=3

T085680	NR-CHA-1C	900	M	Adult	12/17/10	0.041	CVFall-Butte_C	0.548	CVFall-Deer_Cr	0.225	CVFall-Mill_Cr	0.109	46
T085698	CH_skeletc	NA	NA	Adult	12/17/10	0.045	CVFall-Mokelur	0.740	CVFall-Butte_C	0.188	CVFall-Deer_Cr	0.060	29