

Supplementary Material 1. Demographic factors evaluated in Pradel survival and recruitment models examining climate associations for northern spotted owls at 6 study areas in Washington and Oregon, 1990-2005. We hypothesized that the presence of barred owls (*Strix varia*) would be negatively associated with survival, recruitment, and resighting and that rates may differ between male and female owls. We also hypothesized that survival might be negatively associated with REPROD (cost-of-reproduction), but resighting would be higher during nesting years. Recruitment might follow an even-odd year pattern similar to that observed in spotted owl reproduction. We considered each factor alone as well as in combination with other demographic factors. We did not combine temporally-varying covariates(e.g. BO) with a fully time-varying model.

Study Area	Start	Exp.	End	# owls	Annual Survival	Resighting	Recruitment
OLY	1990	1994	2003	408	Expansion year ¹ Sex REPROD ² BO ³	Expansion year Sex REPROD Time varying and time trends BO	Expansion year BO Even-odd Sex
CLE	1992	na	2005	142	Sex REPROD BO	Sex REPROD Time varying and time trends	Sex BO
HJA	1990	2000	2005	364	Expansion year Sex REPROD BO	Expansion year Sex REPROD Time varying and time trends BO	Expansion year Sex BO
OCR	1992	na	2005	423	Sex REPROD BO	Sex REPROD Time varying and time trends BO	Sex BO
TYE	1990	na	2005	396	Sex REPROD BO	Sex REPROD Time varying and time trends BO	Sex BO
CAS	1992	1998	2005	377	Expansion year	Expansion year	Expansion year

Sex	Sex	Sex
REPROD	REPROD	BO
BO	Time varying and time trends	BO

¹Expansion year – 3 of the 6 study areas had a 1-time expansion of study area boundaries to include owl sites added after the initial start date of the study. Survival, resighting, and recruitment rates were allowed to differ from the original area for 2 years following the expansion year.

² Mean # young fledged per pair per year on a given study area.

³ Proportion of territories on a study area with barred owl detections for a given year.

Supplementary Material 2. Hypotheses and statistical models used to examine associations between demographic rates and climate for northern spotted owls on 6 study areas in Washington and Oregon.

Table1. *A priori* hypotheses regarding associations between climate and annual survival and recruitment rates of northern spotted owls on 6 study areas in Washington and Oregon evaluated using Pradel reverse time CMR models, 1990-2005.

Hypotheses	References
Annual Survival	
1. Negative association with cold, wet ^b , and/or stormy winters/ nesting seasons (Mar-Jun).	Olson <i>et al.</i> (2004), Franklin <i>et al.</i> (2000), Glenn (2009)
2. Positive association with wetter-than-normal conditions during the growing season as measured using the Palmer Drought Severity Index (PDSI) or total precipitation during the growing season.	LaHaye <i>et al.</i> (2004), Glenn (2009)
3. Negative association with increased numbers of hot (>32°C) summer days.	Weathers <i>et al.</i> (2001), Glenn (2009)
4. Association with 2 regional climate cycles: the southern oscillation (SOI) and/or the Pacific Decadal Oscillation (PDO).	Lima <i>et al.</i> (2002), Glenn (2009)
Recruitment	
1. Positive association with wetter-than-normal growing seasons as measured using the Palmer Drought Severity Index (PDSI) or total precipitation during the growing season, possibly with a 1-3 year lag.	Glenn (2009), Seamans <i>et al.</i> (2002)

2. Negative or quadratic association with total winter snowfall, possibly with at 1-3 year lag effect. Glenn (2009)
3. Negative association with cold, wet, and/or stormy nesting seasons, possibly with at 1-3 year lag. Franklin *et al.* (2000), Olson *et al.* (2004), Glenn (2009)
4. Negative association with cold, wet, and/or stormy winters, possibly with at 1-3 year lag. Dugger *et al.* (2005), Glenn (2009)
5. Association with 2 regional climate cycles: the southern oscillation (SOI) and/or the Pacific Decadal Oscillation (PDO), possibly with a 1-3 year lag. Lima *et al.* (2002), Glenn (2009)

^bWe considered both linear and quadratic associations between demographic rates and precipitation. For quadratic associations, we hypothesized that demographic rates would be highest at near-average precipitation levels and would decrease during particularly wet or dry periods.

Table 2. Statistical models representing *a priori* hypotheses (described in Table 1) regarding associations between climate and northern spotted owl apparent survival (φ) and recruitment (f) on 6 study areas in Washington and Oregon evaluated using Pradel reverse time CMR models, 1990-2005.

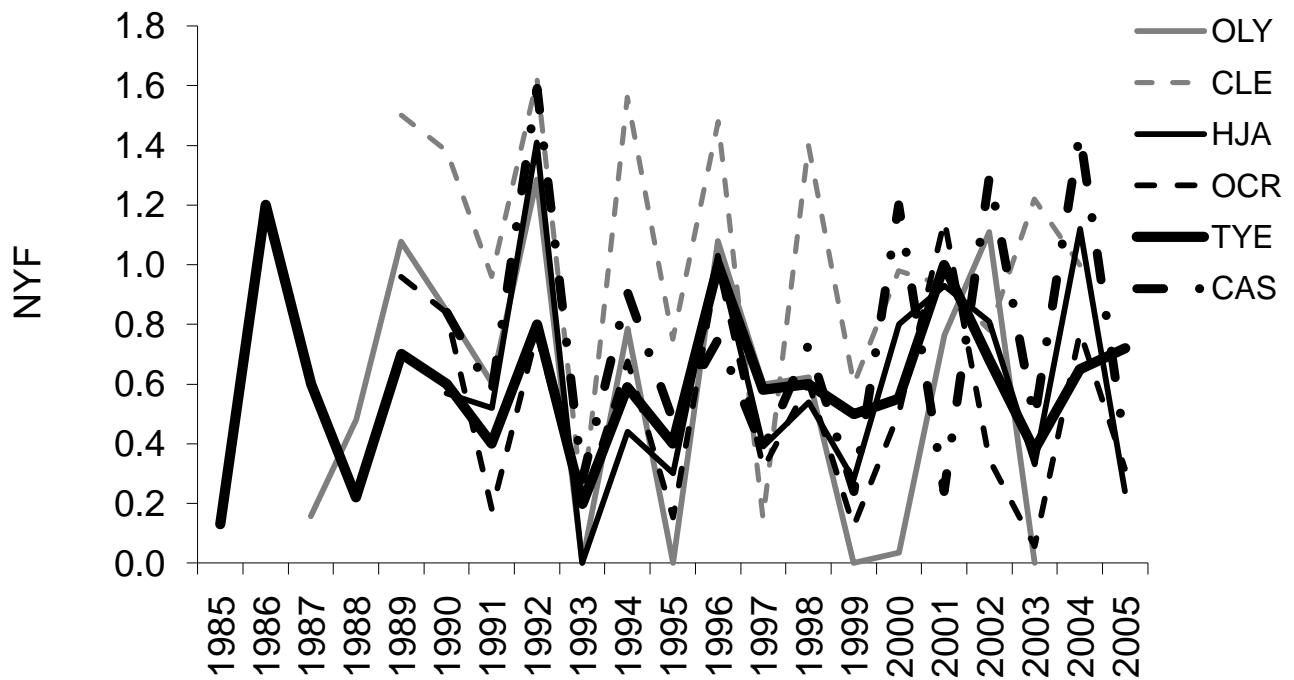
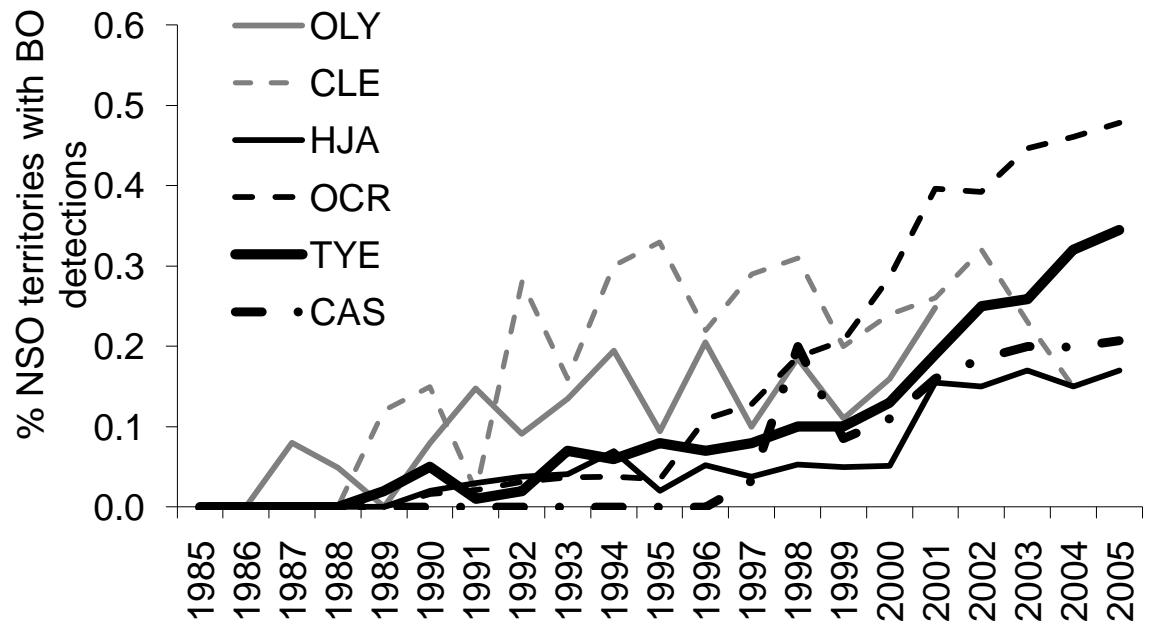
Hypothesis	Demographic		Expected Result	Model Form(s) ^b
	Rate Examined	Model Structure ^a		
Negative association with cold, wet and/or stormy winters and nesting seasons.	φ, f	$\beta_0 + \beta_1(\text{WTMIN})$	$\beta_1 > 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{WPRE})$	$\beta_1 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{WPRE})$	$\beta_1 > 0, \beta_2 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENTMIN})$	$\beta_1 > 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{ENPRE})$	$\beta_1 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENTMIN}) + \beta_2(\text{ENPRE})$	$\beta_1 > 0, \beta_2 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{LNTMIN})$	$\beta_1 > 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{LNPRE})$	$\beta_1 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{LNTMIN}) + \beta_2(\text{LNPRE})$	$\beta_1 > 0, \beta_2 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENTMIN}) + \beta_2(\text{LNTMIN})$	$\beta_1 > 0, \beta_2 > 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENPRE}) + \beta_2(\text{LNPRE})$	$\beta_1 < 0, \beta_2 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENTMIN}) + \beta_2(\text{ENPRE}) + \beta_3(\text{LNTMIN}) + \beta_4(\text{LNPRE})$	$\beta_1 > 0, \beta_2 < 0, \beta_3 > 0, \beta_4 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{ENTMIN})$	$\beta_1 > 0, \beta_2 > 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{ENTMIN}) + \beta_3(\text{LNTMIN})$	$\beta_1 > 0, \beta_2 > 0, \beta_3 < 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{WPRE}) + \beta_2(\text{ENPRE}) + \beta_3(\text{LNPRE})$	$\beta_1 < 0, \beta_2 < 0, \beta_3 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{WPRE}) + \beta_3(\text{ENTMIN}) + \beta_4(\text{ENPRE})$	$\beta_1 > 0, \beta_2 < 0, \beta_3 > 0, \beta_4 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{WPRE}) + \beta_3(\text{en TMIN}) + \beta_4(\text{ENPRE}) + \beta_5(\text{LNTMIN}) + \beta_6(\text{LNPRE})$	$\beta_1 > 0, \beta_2 < 0, \beta_3 > 0, \beta_4 < 0, \beta_5 > 0, \beta_6 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{STORMS-W})$	$\beta_1 < 0$	L, P
	φ, f	$\beta_0 + \beta_1(\text{STORMS-N})$	$\beta_1 < 0$	L, P

	φ, f	$\beta_0 + \beta_1(\text{WPRE}) + \beta_2(\text{STORMS-W})$	$\beta_1 < 0, \beta_2 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{WTMIN}) + \beta_2(\text{WPRE}) + \beta_3(\text{STORMS-winter})$	$\beta_1 > 0, \beta_2 < 0, \beta_3 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{ENPRE}) + \beta_2(\text{STORMS-N})$	$\beta_1 < 0, \beta_2 < 0$	L, P, Q ¹
Positive association with wetter-than-normal growing seasons.	φ, f	$\beta_0 + \beta_1(\text{PDSI})$	$\beta_1 > 0$	L
	φ, f	$\beta_0 + \beta_1(\text{GPRE})$	$\beta_1 > 0$	L, P, Q ¹
Negative effects of heavy winter snow.	f	$\beta_0 + \beta_1(\text{SNOW})$	$\beta_1 < 0$	L, P, Q ¹
	φ, f	$\beta_0 + \beta_1(\text{SNOW}) + \beta_2(\text{WTMIN})$	$\beta_1 < 0, \beta_2 > 0$	L, P, Q ¹
Negative association with hot summer days.	φ	$\beta_0 + \beta_1(\text{DAYS} \geq 32^\circ\text{C})$	$\beta_1 < 0$	L, P
Associations with regional climate cycles.	φ, f	$\beta_0 + \beta_1(\text{SOI})$	$\beta_1 < 0$	L
	φ, f	$\beta_0 + \beta_1(\text{PDO})$	$\beta_1 > 0$	L
	φ, f	$\beta_0 + \beta_1(\text{PDO}) + \beta_2(\text{SOI})$	$\beta_1 > 0, \beta_2 < 0$	L
	φ, f	$\beta_0 + \beta_1(\text{PDO}) + \beta_2(\text{SOI}) + \beta_3(\text{SOI} * \text{PDO})$	$\beta_1 > 0, \beta_2 < 0$	L

^aCovariates: Palmer Drought Severity Index (PDSI), growing season precipitation (GPRE), # of days with storm conditions during winter (STORMS-W), winter precipitation (WPRE), early nesting season (Mar-Apr) precipitation (ENPRE), early nesting season (Mar-Apr) mean minimum temperature (ENTMIN), late nesting season (May-Jun) precipitation (LNPRE), late nesting season (May-Jun) mean minimum temperature (LNTMIN), # of days with storm conditions during winter (STORMS-W, # of days with storm conditions during nesting season (STORMS-N), Southern Oscillation Index (SOI), Pacific Decadal Oscillation Index (PDO), # days with max temperature > 32°C (DAYS>32°C), total winter snowfall (SNOW), winter mean . temperature (WTMIN).

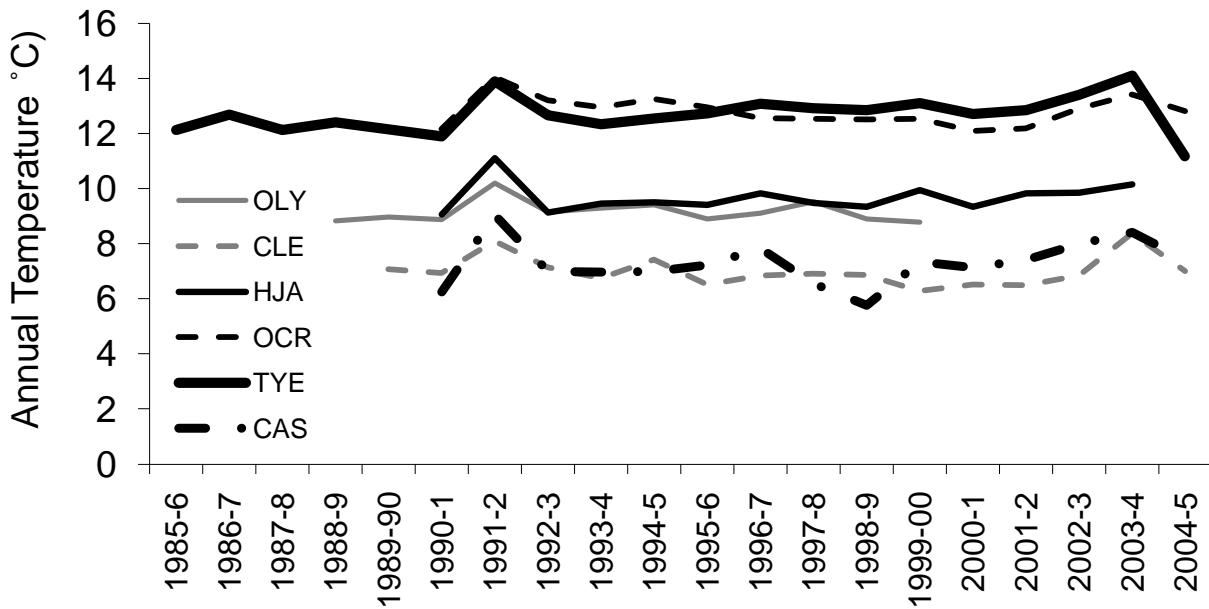
^bL= linear, P=pseudo-threshold (log linear), Q=quadratic We considered both linear and quadratic associations between demographic rates and precipitation and/or storms. For quadratic associations, we hypothesized that demographic rates would be highest at near-average levels and would decrease during particularly wet or dry periods. We also considered lags of 1-year on survival, and 1,2, and 3 years on recruitment for associations with climate.

Supplementary Material 3. Proportion of northern spotted owl (NSO) territories with barred owl (BO) detections and mean number of young fledged per pair per year (REPROD) on 6 long-term study areas in Washington (OLY, CLE) and Oregon (HJA, OCR, TYE, CAS), 1990-2005.

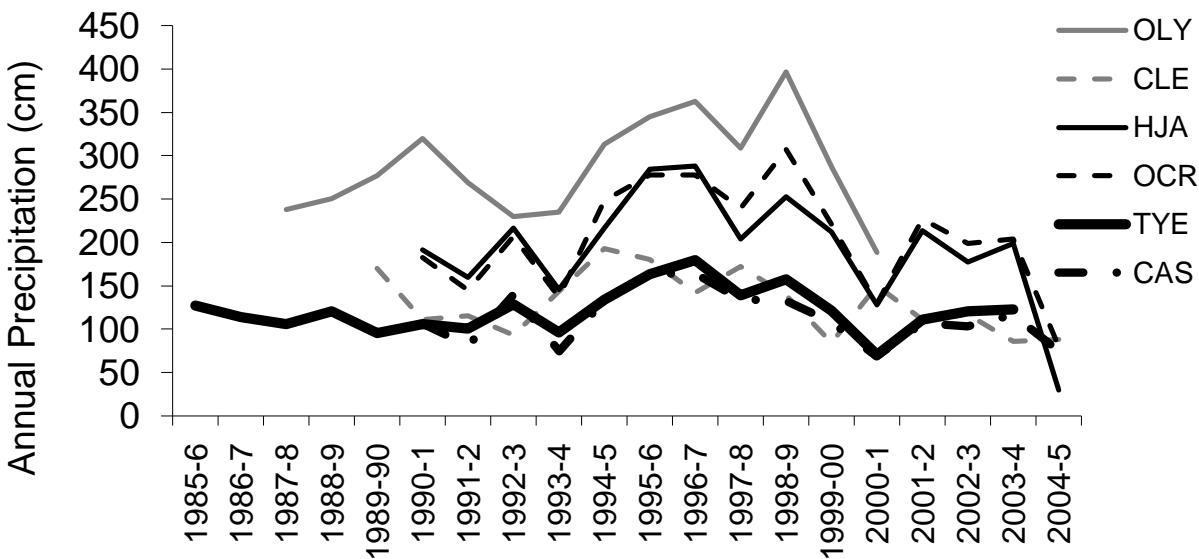


Supplementary Material 4. Summary of mean annual temperature (A), mean annual precipitation (B), number of days with storms (C), total winter snowfall (D), number of days with temperatures ≥ 32 °C (E), Palmer Drought Severity Index (F), and Southern Oscillation/Pacific Decadal Oscillation (G) conditions during the study period, 1990-2005.

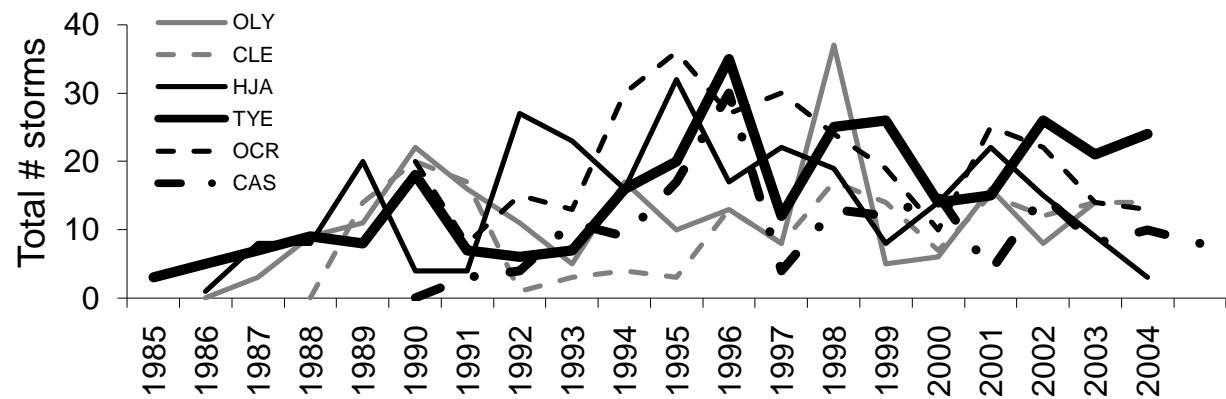
A. Mean annual temperature



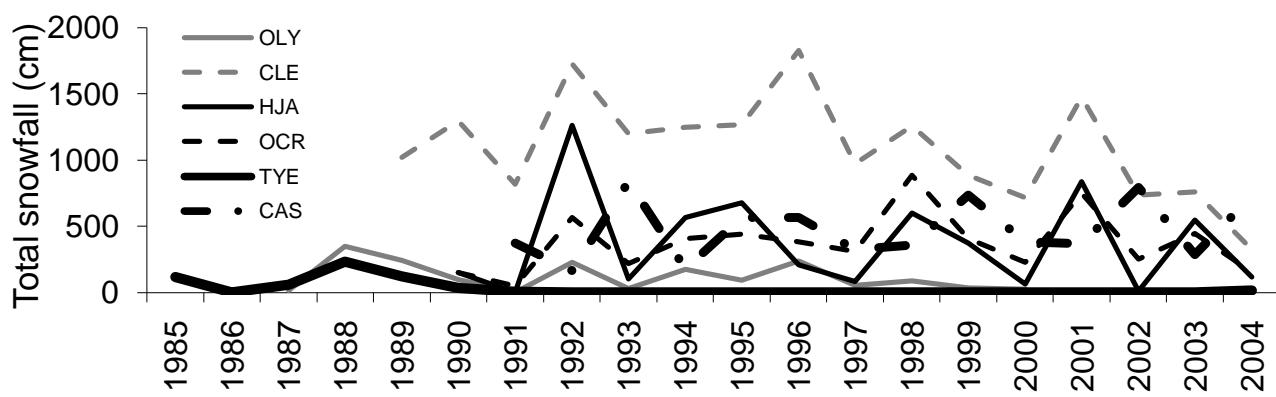
B. Mean annual precipitation (cm)



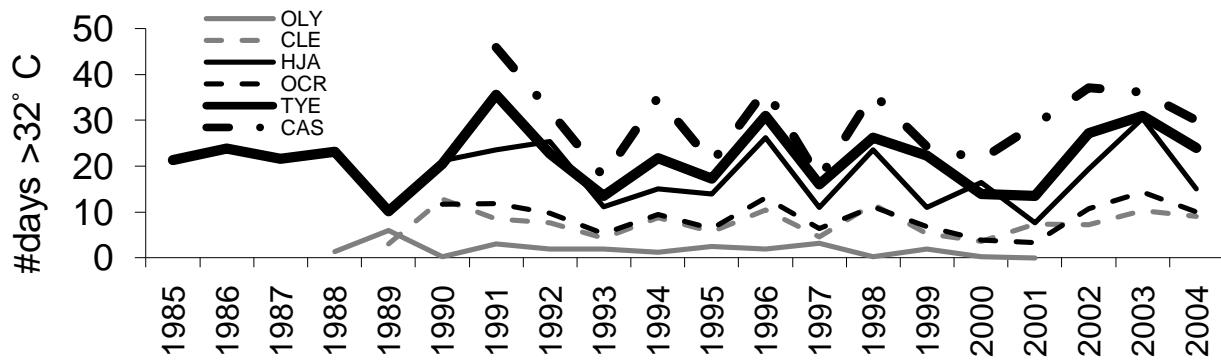
C. Number of days/year with storm conditions



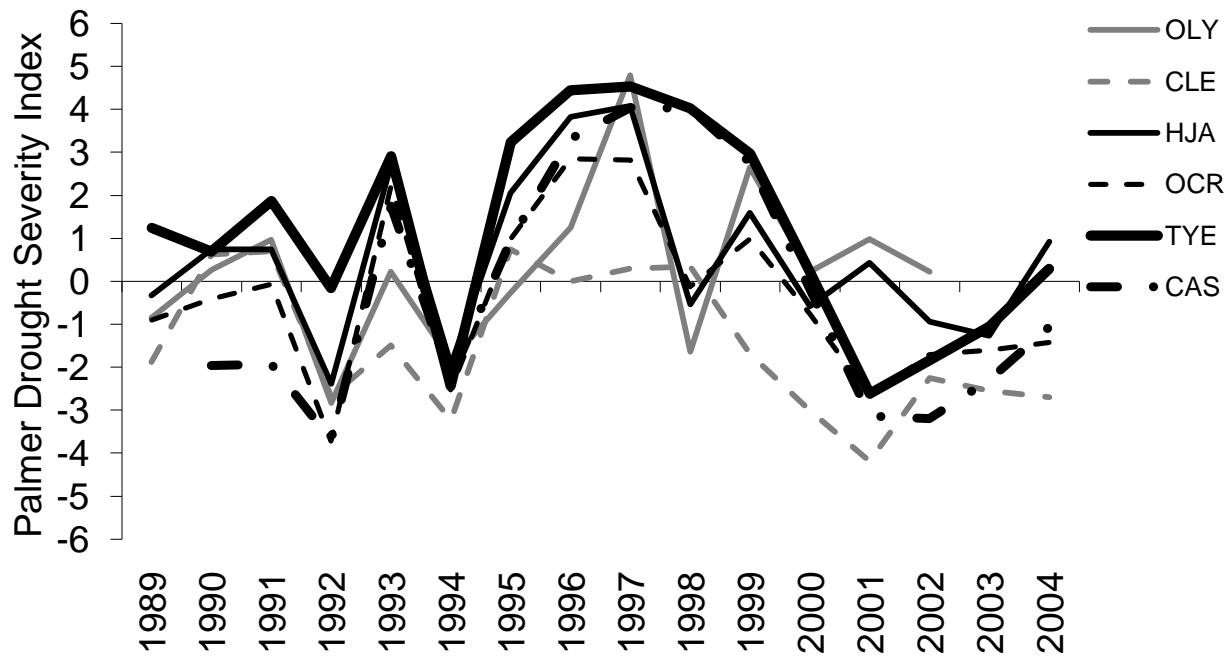
D. Total winter snowfall



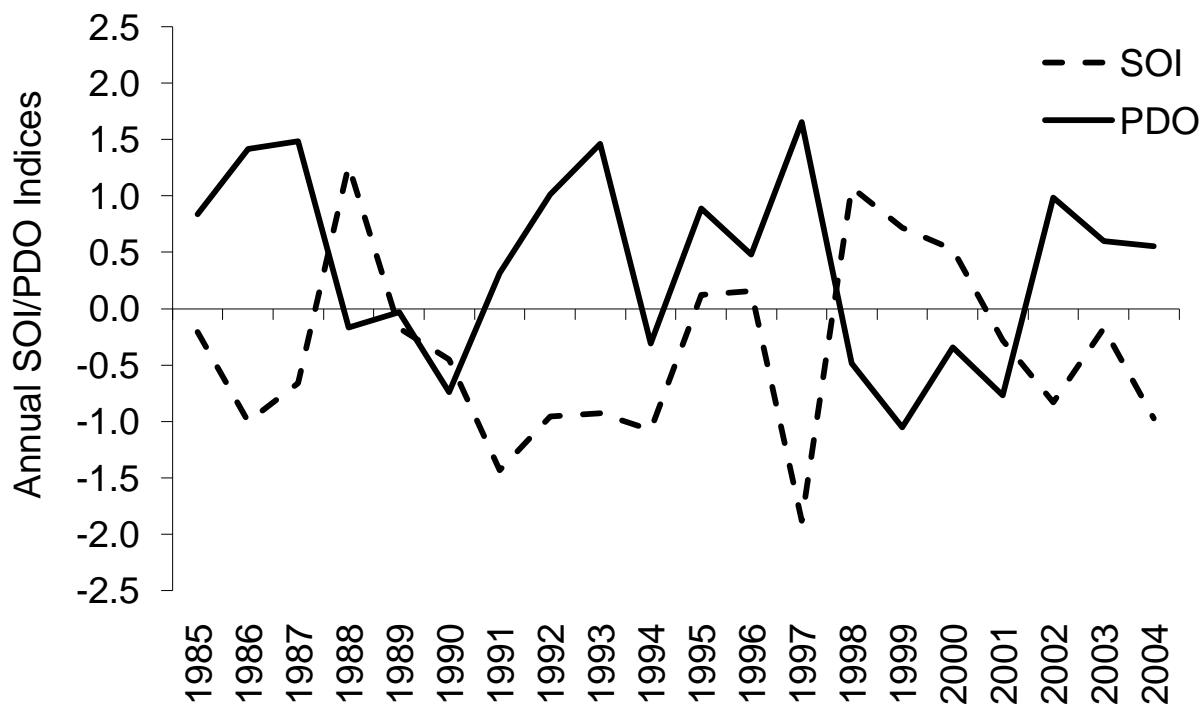
E. Number of days $\geq 32^{\circ}\text{C}$



F. Palmer Drought Severity Index



G. Southern Oscillation/Pacific Decadal Oscillation



Supplementary Material 5. Year-specific parameter estimates for λ , apparent annual survival, and recruitment of northern spotted owls on 6 study areas in Washington and Oregon from reverse time CMR models using the survival and recruitment parameterization. 1990-2005. Lamba is a derived parameter estimate. Estimates are from top model rather than model averaged parameter estimates.

	year	λ	SE	LCI		UCI		φ	SE	LCI		UCI		f	SE	LCI		UCI		Relative contribution to λ	
																			φ	f	
OLY																					
male	1990			0.89	0.03	0.83	0.93	0.11	0.04	0.05	0.23										
	1991	1.00	0.02	0.95	1.04	0.88	0.02	0.83	0.91	0.12	0.02	0.08	0.17								
	1992	0.95	0.04	0.88	1.02	0.87	0.03	0.79	0.92	0.08	0.03	0.04	0.17	0.880	0.12						
	1993	1.09	0.03	1.04	1.15	0.92	0.01	0.89	0.95	0.17	0.03	0.11	0.25	0.912	0.09						
	1994	0.78	0.03	0.72	0.84	0.74	0.03	0.67	0.80	0.04	0.02	0.02	0.09	0.843	0.16						
	1995	1.20	0.05	1.10	1.30	0.91	0.02	0.88	0.94	0.28	0.06	0.18	0.43	0.946	0.05						
	1996	0.89	0.02	0.85	0.92	0.87	0.02	0.83	0.91	0.02	0.01	0.01	0.05	0.763	0.24						
	1997	1.10	0.03	1.05	1.16	0.97	0.01	0.93	0.99	0.13	0.03	0.09	0.21	0.981	0.02						
	1998	0.68	0.04	0.60	0.75	0.66	0.05	0.56	0.75	0.02	0.01	0.01	0.05	0.878	0.12						
	1999	1.23	0.06	1.11	1.35	0.95	0.01	0.92	0.98	0.28	0.08	0.15	0.44	0.974	0.03						
	2000	1.00	0.03	0.94	1.06	0.90	0.02	0.86	0.92	0.10	0.04	0.05	0.20	0.776	0.22						
	2001	0.84	0.03	0.79	0.89	0.82	0.03	0.75	0.87	0.02	0.01	0.00	0.05	0.898	0.10						
	2002			0.81	0.03	0.73	0.87	0.01	0.01	0.00	0.03	0.03	0.982	0.02							
OLY																					
female	1990			0.87	0.03	0.80	0.91	0.11	0.04	0.05	0.23										
	1991	0.97	0.03	0.92	1.02	0.85	0.02	0.80	0.89	0.12	0.02	0.08	0.17								

	1992	0.92	0.04	0.85	1.00	0.84	0.04	0.76	0.90	0.08	0.03	0.04	0.17	0.877	0.12
	1993	1.08	0.03	1.02	1.13	0.90	0.02	0.86	0.93	0.17	0.03	0.11	0.25	0.910	0.09
	1994	0.74	0.03	0.68	0.80	0.70	0.04	0.62	0.76	0.04	0.02	0.02	0.09	0.840	0.16
	1995	1.18	0.05	1.08	1.28	0.90	0.02	0.86	0.93	0.28	0.06	0.18	0.43	0.943	0.06
	1996	0.86	0.02	0.82	0.90	0.85	0.02	0.79	0.89	0.02	0.01	0.01	0.05	0.759	0.24
	1997	1.10	0.03	1.04	1.15	0.96	0.02	0.91	0.99	0.13	0.03	0.09	0.21	0.981	0.02
	1998	0.63	0.04	0.55	0.71	0.61	0.05	0.51	0.70	0.02	0.01	0.01	0.05	0.877	0.12
	1999	1.22	0.06	1.10	1.34	0.94	0.02	0.90	0.97	0.28	0.08	0.15	0.44	0.972	0.03
	2000	0.98	0.03	0.92	1.04	0.88	0.02	0.84	0.91	0.10	0.04	0.05	0.20	0.774	0.23
	2001	0.80	0.03	0.75	0.86	0.79	0.03	0.71	0.85	0.02	0.01	0.00	0.05	0.896	0.10
	2002					0.77	0.04	0.69	0.84	0.01	0.01	0.00	0.03	0.981	0.02

CLE	1992	0.98	0.02	0.93	1.02	0.75	0.04	0.66	0.81	0.08	0.01	0.05	0.11		
	1993	0.94	0.04	0.87	1.01	0.84	0.02	0.81	0.88	0.13	0.02	0.09	0.18		
	1994	0.90	0.04	0.83	0.97	0.81	0.03	0.74	0.86	0.13	0.02	0.09	0.19	0.87	0.13
	1995	0.96	0.02	0.91	1.00	0.83	0.03	0.75	0.89	0.06	0.02	0.04	0.10	0.86	0.14
	1996	0.93	0.03	0.88	0.98	0.87	0.02	0.83	0.91	0.08	0.01	0.06	0.11	0.93	0.07
	1997	1.04	0.03	0.97	1.10	0.88	0.02	0.83	0.91	0.06	0.02	0.03	0.10	0.91	0.09
	1998	0.89	0.03	0.83	0.95	0.90	0.02	0.84	0.94	0.13	0.02	0.09	0.19	0.94	0.06
	1999	0.93	0.03	0.88	0.99	0.77	0.03	0.71	0.83	0.11	0.02	0.09	0.15	0.87	0.13
	2000	0.85	0.06	0.74	0.97	0.81	0.03	0.75	0.86	0.12	0.02	0.09	0.16	0.87	0.13
	2001	0.87	0.05	0.77	0.96	0.73	0.06	0.61	0.83	0.12	0.02	0.09	0.17	0.87	0.13
	2002	0.91	0.03	0.85	0.98	0.79	0.05	0.67	0.87	0.08	0.01	0.06	0.11	0.85	0.15
	2003					0.85	0.03	0.79	0.90	0.06	0.02	0.03	0.10	0.91	0.09

	2004	0.85	0.03	0.78	0.90	0.05	0.02	0.02	0.10	0.93	0.07
HJA	1990	1.07	0.02	1.02	1.12	0.89	0.01	0.87	0.90	0.20	0.04
	1991	0.90	0.03	0.84	0.95	0.89	0.01	0.87	0.91	0.18	0.03
	1992	1.04	0.01	1.01	1.06	0.79	0.03	0.72	0.85	0.10	0.01
	1993	0.95	0.02	0.92	0.98	0.93	0.01	0.89	0.95	0.11	0.01
	1994	0.96	0.01	0.94	0.99	0.90	0.01	0.87	0.91	0.05	0.02
	1995	0.98	0.02	0.95	1.02	0.91	0.01	0.88	0.93	0.06	0.01
	1996	0.97	0.01	0.95	0.99	0.84	0.02	0.81	0.87	0.14	0.02
	1997	0.96	0.01	0.93	0.98	0.90	0.01	0.88	0.92	0.07	0.01
	1998	1.00	0.01	0.97	1.02	0.89	0.01	0.87	0.91	0.07	0.02
	1999	0.96	0.01	0.93	0.98	0.91	0.01	0.88	0.93	0.09	0.02
	2000	0.95	0.02	0.92	0.98	0.86	0.01	0.84	0.88	0.09	0.01
	2001	0.87	0.01	0.85	0.89	0.85	0.01	0.82	0.87	0.09	0.02
	2002	0.91	0.01	0.89	0.93	0.86	0.01	0.84	0.88	0.01	0.00
	2003			0.90	0.01	0.88	0.92	0.01	0.00	0.00	0.02
	2004			0.83	0.02	0.79	0.86	0.00	0.00	0.00	0.01
OCR	1992	1.11	0.02	1.07	1.16	0.83	0.04	0.75	0.89	0.11	0.02
	1993	0.94	0.02	0.91	0.98	0.92	0.02	0.87	0.96	0.19	0.03
	1994	1.12	0.03	1.06	1.18	0.86	0.02	0.80	0.90	0.09	0.02
	1995	0.98	0.02	0.95	1.01	0.91	0.02	0.87	0.94	0.21	0.04
	1996	1.00	0.01	0.98	1.03	0.90	0.02	0.86	0.93	0.08	0.02
	1997	0.92	0.01	0.90	0.95	0.89	0.02	0.84	0.92	0.12	0.01
	1998	0.94	0.02	0.91	0.98	0.86	0.01	0.83	0.88	0.07	0.01
										0.05	0.10
										0.88	0.12

		1999	0.92	0.01	0.89	0.94	0.84	0.03	0.78	0.89	0.10	0.01	0.08	0.13	0.93	0.07
		2000	0.96	0.02	0.91	1.00	0.84	0.02	0.79	0.87	0.08	0.01	0.06	0.11	0.89	0.11
		2001	0.92	0.02	0.88	0.95	0.88	0.03	0.80	0.93	0.08	0.02	0.05	0.13	0.91	0.09
		2002	0.88	0.02	0.85	0.91	0.85	0.02	0.80	0.88	0.07	0.02	0.04	0.11	0.92	0.08
		2003			0.84	0.03	0.78	0.88	0.04	0.01	0.02	0.07	0.07	0.92	0.08	
		2004			0.83	0.03	0.76	0.88	0.02	0.01	0.01	0.05	0.05	0.95	0.05	
TYE	1990	1.07	0.04	1.00	1.14	0.87	0.01	0.85	0.88	0.24	0.05	0.16	0.34			
	1991	1.01	0.03	0.95	1.08	0.84	0.02	0.80	0.87	0.23	0.04	0.16	0.31			
	1992	1.02	0.02	0.97	1.06	0.83	0.02	0.79	0.86	0.19	0.03	0.13	0.27	0.78	0.22	
	1993	0.95	0.02	0.91	0.98	0.86	0.01	0.84	0.89	0.15	0.02	0.11	0.21	0.81	0.19	
	1994	0.95	0.03	0.90	1.00	0.88	0.02	0.84	0.90	0.07	0.01	0.05	0.10	0.85	0.15	
	1995	1.00	0.02	0.96	1.03	0.82	0.02	0.78	0.86	0.12	0.02	0.08	0.18	0.92	0.08	
	1996	1.01	0.02	0.98	1.05	0.90	0.01	0.86	0.92	0.10	0.02	0.07	0.14	0.87	0.13	
	1997	0.96	0.02	0.92	1.00	0.89	0.01	0.86	0.91	0.12	0.02	0.09	0.16	0.90	0.10	
	1998	0.96	0.02	0.92	0.99	0.84	0.02	0.80	0.88	0.12	0.01	0.09	0.15	0.88	0.12	
	1999	1.07	0.02	1.02	1.11	0.90	0.02	0.86	0.92	0.06	0.01	0.04	0.09	0.88	0.12	
	2000	1.05	0.02	1.01	1.10	0.87	0.02	0.84	0.90	0.19	0.02	0.15	0.24	0.94	0.06	
	2001	0.94	0.02	0.91	0.98	0.88	0.01	0.86	0.91	0.17	0.02	0.13	0.23	0.82	0.18	
	2002	0.92	0.01	0.90	0.95	0.84	0.02	0.81	0.87	0.10	0.02	0.07	0.14	0.84	0.16	
	2003			0.87	0.01	0.84	0.89	0.06	0.01	0.03	0.09	0.09	0.89	0.11		
	2004			0.88	0.01	0.86	0.90	0.02	0.01	0.01	0.04	0.04	0.94	0.06		
CAS	1992	0.94	0.02	0.91	0.98	0.83	0.01	0.80	0.85	0.02	0.02	0.00	0.10			
	1993	0.82	0.01	0.79	0.85	0.92	0.02	0.86	0.95	0.03	0.02	0.01	0.09			
	1994	1.11	0.04	1.04	1.18	0.80	0.02	0.76	0.84	0.02	0.01	0.01	0.05	0.97	0.03	

1995	0.81	0.02	0.77	0.85	0.90	0.02	0.86	0.93	0.21	0.05	0.13	0.32	0.98	0.02	
1996	1.23	0.07	1.09	1.36	0.78	0.02	0.73	0.83	0.02	0.01	0.01	0.07	0.81	0.19	
1997	0.91	0.04	0.82	0.99	0.92	0.02	0.87	0.95	0.31	0.09	0.16	0.50	0.97	0.03	
1998	1.04	0.04	0.97	1.11	0.79	0.02	0.75	0.83	0.11	0.05	0.04	0.27	0.75	0.25	
1999	1.16	0.07	1.04	1.29	0.88	0.02	0.85	0.91	0.16	0.05	0.08	0.28	0.88	0.12	
2000	0.91	0.02	0.87	0.95	0.90	0.02	0.85	0.93	0.27	0.09	0.13	0.47	0.85	0.15	
2001	0.90	0.03	0.84	0.97	0.85	0.01	0.82	0.87	0.06	0.03	0.03	0.13	0.77	0.23	
2002	0.81	0.02	0.78	0.84	0.78	0.02	0.73	0.83	0.12	0.04	0.06	0.22	0.93	0.07	
2003						0.79	0.02	0.75	0.83	0.02	0.01	0.00	0.05	0.87	0.13
2004						0.84	0.01	0.82	0.87	0.01	0.01	0.00	0.04	0.98	0.02