

covariate. Residuals of a linear regression of brood mass and brood-day 0 were used as the relative brood mass. Because nestling mass declines throughout the breeding season in this population (C.F. Thompson, unpubl. data), differences in brood mass associated with hatching date

can be accounted for by analyzing the residuals in this fashion. ANCOVA on the number of nestlings that survived to nest-leaving from successful nests (at least one fledgling produced) was performed by treatment for each year of the study, with both clutch size and brood-day 0 as covariates.

Results

A total of 75 nests were supplemented before the addition of the wire mesh screen. When Blue Jays arrived at the feeders, House Wrens were never observed to enter the nestbox, but instead began giving alarm calls and occasionally striking the jays. If

Table 1. nest success of fed and control nests before and after the addition of the wire mesh screen (* $P > 0.05$).

Pre-Wire Mesh	Success (Proportion)	Fail	Cadj
Control	273 (0.79)	74	0.0291*
Fed	20	7	
Post Wire Mesh			
Control	64	28	1.143*
Fed	31	21	

Table 2. Kruskal-Wallis test of treatment effects on median number of days (lower and upper quartile range) for incubation and nestling periods (Treatments: Inc = fed during incubation stage, YG = fed during Nestling stage, Multi = fed during both Incubation and Nestling stages, and control = not fed).

Year	Season	Treatment	(n)	Incubation Period	x2	df	P	Nestling Period	x2	df	P
1990	Early	Yg	(18)	13 (13–15)	0.34,	1,	0.56	15.5 (14–16)	0.05,	1,	0.83
		Control	(143)	13 (13–16)				15 (14–16)			
	Late	Yg	(11)	12 (12–14)	0.06,	2,	0.97	15 (14–16)	2.50,	2,	0.29
		Multi	(8)	12 (12–14)				16.5 (14–18)			
1991	Early	Control	(110)	12 (12–15)				15 (13–18)			
		Inc	(14)	12 (12–13)	2.95,	3,	0.40	15 (13–17)	4.53,	3,	0.21
		Yg	(9)	13 (12–14)				15 (14–17)			
		Multi	(12)	12 (12–14)				15 (13–17)			
	Late	Control	(18)	12 (12–14)				16 (15–17)			
		Inc	(14)	12 (12–13)	2.95,	3,	0.40	15.5 (15–16)	5.92,	3,	0.12
		Yg	(9)	13 (12–14)				15 (12–16)			
		Multi	(12)	12 (12–14)				15 (12–17)			
1992	Early	Control	(18)	12 (12–14)				16 (15–18)			
		Inc	(14)	12 (12–13)	2.95,	3,	0.40	16 (13–18)	2.62,	3,	0.45
		Yg	(9)	12 (12–14)				16 (14–17)			
		Multi	(12)	12 (12–14)				16 (13–17)			
	Late	Control	(18)	12 (12–14)				16 (13–18)			
		Inc	(14)	12 (12–13)	2.95,	3,	0.40	16 (15–17)	0.07,	3,	0.99
		Yg	(9)	13 (12–14)				16 (11–17)			
		Multi	(12)	12 (12–14)				16 (15–17)			
		Control	(18)	12 (12–14)				16 (14–17)			

Table 3. ANCOVA tests for effects of treatment on mean relative brood mass, with brood size as a covariate.

Season	Year	Model			Treatment			Brood Size		
		F	df _{model} , df _{error}	P	F	df ¹	P	F	df ¹	P
Early	1990	0.7	2,118	0.930	0.04	1	0.844	0.12	1	0.727
	1991	3.68	4,48	0.011	4.48	3	0.008	0.20	1	0.655
	1992	0.85	4,58	0.502	0.66	3	0.578	1.62	1	0.209
Late	1990	2.10	3,112	0.105	0.46	2	0.631	5.56	1	0.020
	1991	0.41	4,34	0.803	0.31	3	0.816	0.95	1	0.336
	1992	1.22	4,52	0.314	1.61	3	0.199	1.14	1	0.708

¹Error df are the same as model df error