

APPENDIX C3: NEFSC VTR CPUE GLM model

The SAS System
14:00 Thursday, March 31, 2005 6

The GLM Procedure

Class Level Information

Class	Levels	Values
lndyear	10	1995 1996 1997 1998 1999 2001 2002 2003 2004 9999
permit	25	delete permit numbers

Number of observations 1226
The SAS System
14:00 Thursday, March 31, 2005 7

The GLM Procedure

Dependent Variable: LNCPUE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	33	331.2333689	10.0373748	54.83	<.0001
Error	1192	218.2168857	0.1830679		
Corrected Total	1225	549.4502547			

R-Square	Coeff Var	Root MSE	LNCPUE Mean
0.602845	6.542155	0.427864	6.540113

Source	DF	Type I SS	Mean Square	F Value	Pr > F
lndyear	9	228.8146560	25.4238507	138.88	<.0001
permit	24	102.4187130	4.2674464	23.31	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
lndyear	9	174.3859974	19.3762219	105.84	<.0001
permit	24	102.4187130	4.2674464	23.31	<.0001

Parameter	Estimate	Standard Error	t Value	Pr > t
Intercept	5.113658653 B	0.25524735	20.03	<.0001
lndyear 1995	0.003251958 B	0.06064188	0.05	0.9572
lndyear 1996	0.333649416 B	0.05686636	5.87	<.0001
lndyear 1997	0.852841891 B	0.05578225	15.29	<.0001
lndyear 1998	0.326173101 B	0.05434864	6.00	<.0001
lndyear 1999	-0.010167260 B	0.05602196	-0.18	0.8560
lndyear 2001	0.341776436 B	0.05753438	5.94	<.0001
lndyear 2002	0.542159089 B	0.05809594	9.33	<.0001
lndyear 2003	1.020162126 B	0.06030139	16.92	<.0001
lndyear 2004	1.317256060 B	0.06425412	20.50	<.0001
lndyear 9999	0.000000000 B	.	.	.
permit -	0.961909899 B	0.49808246	1.93	0.0537
permit -	-1.056374914 B	0.31554991	-3.35	0.0008
permit -	-1.126161751 B	0.39058488	-2.88	0.0040
permit -	-0.219682088 B	0.39583474	-0.55	0.5790
permit -	1.031794240 B	0.49773781	2.07	0.0384
permit -	-0.105358649 B	0.31694803	-0.33	0.7396
permit -	0.196988940 B	0.27462680	0.72	0.4733
permit -	0.783944131 B	0.30800139	2.55	0.0110
permit -	1.417322553 B	0.30254575	4.68	<.0001
permit -	0.066578059 B	0.26406366	0.25	0.8010
permit -	0.872233511 B	0.25449976	3.43	0.0006
permit -	1.470460556 B	0.31246790	4.71	<.0001
permit -	0.858064274 B	0.26325314	3.26	0.0011
permit -	0.482304252 B	0.29211263	1.65	0.0990

permit	-	1.011645989 B	0.28165476	3.59	0.0003
permit	-	1.914340963 B	0.49796734	3.84	0.0001
permit	-	0.933575330 B	0.25354360	3.68	0.0002
permit	-	-1.099661139 B	0.49821588	-2.21	0.0275
permit	-	0.944271665 B	0.25359215	3.72	0.0002
permit	-	1.163582345 B	0.35355219	3.29	0.0010
permit	-	1.140939563 B	0.25261419	4.52	<.0001
permit	-	-1.595414622 B	0.49850958	-3.20	0.0014
permit	-	0.891670841 B	0.28966550	3.08	0.0021
permit	-	1.075896536 B	0.25270683	4.26	<.0001
permit	-	0.000000000 B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.