Bobcat Pelt Quality and Temporal Distribution of Harvest in Texas

Robert D. Bluett, *Caesar Kleberg Wildlife Research Institute, Texas A&I University, Kingsville, TX 78363*

Michael E. Tewes, *Caesar Kleberg Wildlife Research Institute, Texas A&I University, Kingsville, TX 78363*

Bruce C. Thompson,[1] *Texas Parks and Wildlife Department, 4200 Smith School Rd., Austin, TX 78744*

Abstract: We surveyed licensed bobcat (*Felis rufus*) pelt dealers to determine relative abundance of high-quality pelts during the commercial harvest season (15 Nov 1982 to 15 Feb 1988) in Texas. Respondents indicates most high-quality pelts were obtained during January and February. Abundance of high-quality pelts was low from 15 to 30 November, but few bobcats were harvested during this time. Current season dates seem reasonable if managers wish to maximize recreational opportunities rather than pelt quality.

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The quality of a pelt varies with its size, primeness, degree of damage, and color and clarity of the fur (Obbard 1987). Most open seasons include the period of peak pelt quality, but are often long enough so that lower quality pelts are harvested early and late in the season (Hon 1981, Hoffman and Alexander 1984, Obbard 1987). Knowledge of temporal changes in pelt quality and harvest levels can allow managers to better evaluate effects of altering season dates.

In Texas, bobcats are classified as nongame animals. State law allows year-round harvest for personal use but restricts commercial harvest to a 92-day season. Pelts taken for commercial purposes must be tagged by licensed dealers prior to purchase, sale, or transport outside the state.

We surveyed licensed pelt dealers to determine relative abundance of high-quality pelts during the commercial harvest season. We also summarized temporal distribution of the harvest and evaluated current season dates.

[1]Current address: Cooperative Fish and Wildlife Research Unit, New Mexico State Univ., P.O. Box 30003, Dept. 4901, Las Cruces, NM 88003

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Methods

We mailed questionnaires to all dealers ($N = 174$) licensed in Texas during the 1987–88 season. Surveys were mailed in April 1988. A second survey was sent to non-respondents 3 weeks later. For each 15-day increment of the season, dealers specified whether no, some, or most pelts were high-quality. We instructed dealers to base judgements on quality on pelt primeness, size, color, and condition.

Dealers were asked to specify season opening and closing dates they believed would help ensure harvest of high-quality furs. Only complete questionnaires from respondents who tagged bobcat pelts during the previous commercial season were used for analyses. We obtained data about the temporal distribution of annual harvests during 1980–86 from unpublished tagging reports provided by TPWD.

Results

Three surveys were undeliverable. We received 88 responses (51% return) after 2 mailings. Seventy-one (42%) were usable. These dealers tagged 41% of all pelts registered during the 1987–88 season. Most respondents (54%) obtained pelts from >1 ecological region. Some (22%) obtained pelts from 3 or more regions.

Relative abundance of high-quality pelts increased as the harvest season progressed (Fig. 1). Most respondents (91%) believed the commercial harvest season should open after 15 November. Thirty-two percent specified an opening date of 1 December, and 28% specified 15 December. Fifty-one percent believed the harvest season should close after 15 February.

Furtakers reported dates of harvest for98,602 bobcats taken during the 1980–81 through 1986–87 commercial seasons (Table 1). Although the commercial season extended from 15 November to 15 February, most bobcats (88%) were taken while the furbearer season was open (1 Dec to 31 Jan).

Discussion

Our results were similar to those reported for the northern United States (Stains 1979) and Georgia (Hon 1981), where high-quality pelts were harvested from early December to the end of February. We did not attempt to identify local variations in pelt quality because criteria used by the fur industry do not allow fine distinctions. No quantitative methods exist for evaluating pelt primeness, damage, fur color, and fur clarity (Obbard 1987, Worthy et al. 1987). Possible non-response bias and the tendency for respondents to obtain pelts from >1 region also prevented analysis of

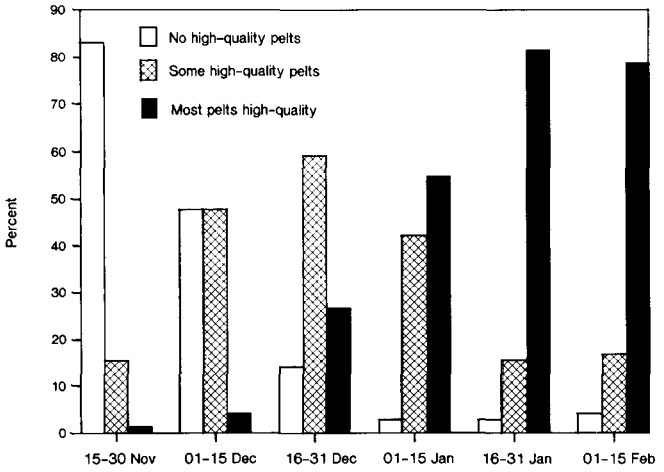

Figure 1. Percent of respondents (N = 88) reporting no, some, or most bobcat pelts as high-quality during 6 15-day increments of the 1987–88 harvest season in Texas.

local variations. Developing quantitative methods to judge fur quality would allow better discriminatory ability and use of more efficient sampling designs.

Postponing the season until 1 December might reduce capture of non-target animals and simplify enforcement by establishing a uniform opening date for bobcats and species classified as furbearers. The 15-day reduction in season length probably would not affect harvest levels. Tewes and Scott (1987) reported that a 33%–50% reduction in season length was necessary to reduce bobcat harvests in western states.

Few commercial furtakers would benefit from a season extension. A decline in the bobcat harvest during 1 to 15 February indicates many furtakers ceased harvest activities when the furbearer season closed on 31 January.

Goals for a particular season must be established relative to a species' status.

Table 1. Number and percent of bobcat pelts taken during 6 15-day intervals of the commercial harvest seasons in Texas, 1980–1986.

	15–30 Nov		1–15 Dec		16–31 Dec		1–15 Jan		16–31 Jan		1–15 Feb	
Season	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%	*N*	%
1980–81	668	4.9	3,028	22.0	2,880	21.0	3,382	24.6	2,598	18.9	1,182	8.6
1981–82	385	3.6	1,945	18.2	2,069	19.4	2,646	24.8	2,563	24.0	1,077	10.1
1982–83	502	3.4	2,837	19.1	2,928	19.7	3,855	25.9	3,610	24.3	1,121	7.6
1983–84	808	5.8	2,320	16.6	2,985	21.4	3,604	25.9	3,575	25.6	648	4.7
1984–85	890	6.2	2,563	17.8	2,945	20.4	3,410	23.7	3,695	25.6	906	6.3
1985–86	193	1.6	2,084	17.2	2,343	19.4	3,627	30.0	2,997	24.8	857	7.1
1986–87	595	3.2	3.196	16.9	3,554	18.8	4,619	24.5	5,028	26.6	1,884	10.0
Total	4,041	4.1	17,973	18.2	19,704	20.0	25.143	25.5	24,066	24.4	7,675	7.8

Bobcat populations seem secure in most parts of Texas (Bluett and Tewes 1988). The current commercial season is reasonable if managers wish to maximize recreational opportunities rather than pelt quality. Managers may want to consider an opening date of 1 or 15 December when public and political attitudes support harvest of high-quality pelts. We suggest the commercial season should open on or after 1 January if harvest levels must be reduced dramatically.

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