



Sheep and Goat Internal Parasite Survey

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Internal parasites are of major significance in sheep and goats in Texas because of favorable environmental conditions for the propagation and survival outside the host. In the past several years internal parasites which are resistant to both label-approved and other available drugs have become more widespread.

In 1993, a survey was designed to help determine the various management techniques that are used to help control internal parasites in sheep and goats. One thousand four hundred eighty five surveys were sent to sheep and goat producers in the 33 major sheep and goat producing counties in Texas. Seven hundred surveys were returned (47 percent) with 650 (93 percent) being completed and 50 (7 percent) indicating they were no longer in business.

Of the 650 producers who completed surveys, 473 (73 percent) indicated they raised finewool sheep, 136 (21 percent) raised medium wool sheep, 340 (52 percent) raised Angora goats and 237 (36 percent) raised meat goats. Although a small



number of respondents did not indicate the number of animals they owned, those that did respond represented approximately 385,000 finewool sheep, 20,000 mediumwool sheep, 285,000 Angora goats and 40,000 meat goats.

The winter supplemental feeds used most by producers were protein blocks (65 percent), whole shelled corn (64 percent), protein cubes (44 percent), grain cubes (39 percent), salt-limited feeds (33 percent), whole cotton-

seed (30 percent) and liquid feed (16 percent). One percent of the respondents reported they never fed. Eighty-four percent fed a free choice mineral supplement while 50 percent fed white salt and 42 percent fed yellow salt.

When asked if they dewormed their livestock, approximately 99 percent indicated they dewormed their sheep and Angora goats while only 66 percent dewormed their meat goats. Frequency of deworming is presented in Table 1. Methods used to decide when to deworm were: at certain times of the year (by the calendar) - 43 percent; when conditions warrant (weather) - 40 percent; fecal egg counts - 36 percent; when animals are obviously wormy (general appearance) - 33 percent; and when gathering animals for some other purpose - 30 percent.

Anthelmintics most often used by producers in the last five years were: ivermectin (Ivomec[®]) - 87 percent; levamisole (Tramisol[®]) - 74 percent; albendazole (Valbazen[®]) - 43 percent; fenbendazole (Safeguard[®], Panacur[®]) - 42%; oxfendazole (Synanthic[®], Benzelmin[®]) -

22 percent; thiabendazole (TBZ[®]) - 20 percent; mebendazole (Telmin[®]) - 11 percent; and phenothiazine - 4 percent. All other products were used by 2 percent or less of producers. Products, in order of concern, that producers believe parasites are becoming resistant to were levamisole, thiabendazole, fenbendazole and ivermectin.

Nine percent of the respondents reported they never rotate wormers. Frequency and reasons for rotating wormers were: once a year - 38 percent; when product becomes ineffective - 31 percent; each time they deworm - 29 percent; and when there is a special on the price of anthelmintics - 4 percent.

The method most often used to determine the effectiveness of dewormers was visual observation of livestock (82 percent). Fecal egg counts ran a distant second with 36 percent while visual observation of fecal pellets and livestock grazing patterns accounted for 8 percent and 4 percent, respectively.

Approximately 19 percent of producers use no parasite management strategies while 80 percent use some form of pasture rest and rotation. Thirty-one percent of respondents graze fields while only 7 percent are attempting to select sheep and goats that are resistant to internal parasites.

Table 1. Frequency of deworming.

Times/year	Sheep		Angora goats		Meat goats	
	#*	%	#*	%	#*	%
0	4	0.8	5	1.5	78	33.6
1-2	188	36.4	166	50.8	117	50.5
3-4	262	50.8	134	41.0	30	12.9
5 or more	62	12.0	22	6.7	7	3.0
Total	516	100	327	100	232	100

*Number of surveys returned.

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