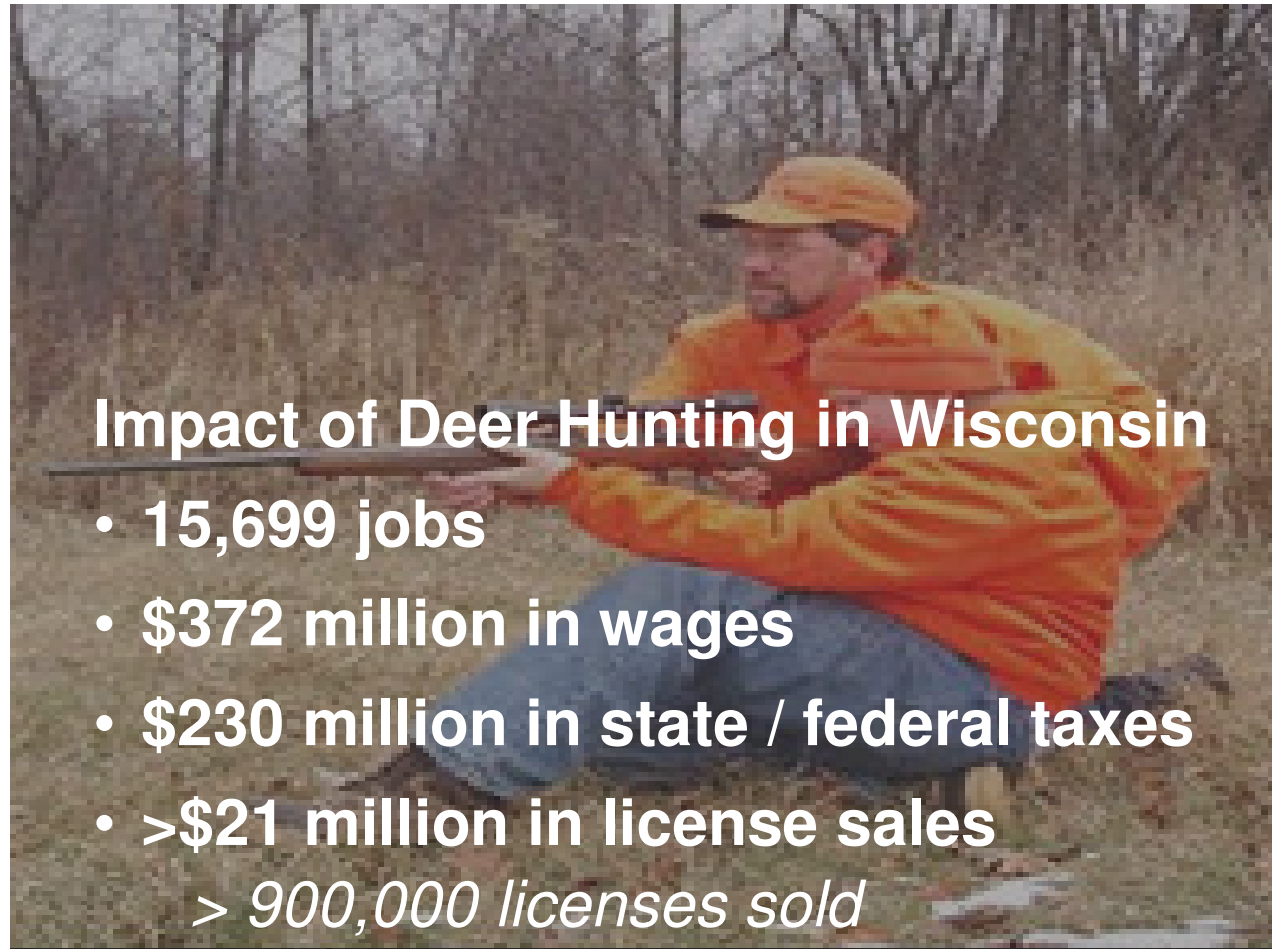


Why Is the Over-Winter Goal SO Critical?



Total Economic Impact of Deer Hunting is > \$1 Billion Annually!

Hunter Satisfaction Must Also Be Considered **When Establishing Populations Goals**

So, how many deer on the landscape will satisfy hunters?

The annual average harvest from 1990 – 2007 was approximately 440,000 deer

A harvest goal of 440,000, would mean an annual harvest of 176,000 bucks and 264,800 antlerless deer. (Antlerless harvest rate = 1.5:1)

Is a harvest goal of 440,000 deer manageable and enough to satisfy hunters?

Here's what we know:

- Last years hunt created many dissatisfied hunters (Harvest was 323,482)
- Hunters are capable of harvesting 440,000 without herd control measures. (T-Zone & Earn-a-buck)
- Deer license sales stayed relatively constant since 1990

What Calculations are Used by the DNR for Predicting Annual Deer Harvest?

Table 1. Proposal

	Total OW Goal	Predicted Prehunt Population	Predict ed Total Buck Harvest	Predicted Total Antlerless Harvest	Predicted Total Harvest	Expansion (Surviving Fawns)
Current goals (53.8% exp. rate)	734,938	1,130,176	133,482	183,836	343,685	395,238
Board adopted rule (53.8% exp rate)	745,636	1,146,438	135,644	186,263	348,523	400,801
Proposed goal (53.8% exp rate)	794,172	1,222,075	144,454	199,099	372,090	427,903
% change from Current	8.08%	8.13%	8.12%	8.3%	8%	
Using 50 yr Avg Exp rate (43%)	794,172	1,135,665	118,780	178,170	296,950	341,493
Using '08 Exp Rate (25.2%)	794,172	994,303	69,610	104,416	174,027	200,131

Assuming buck to antlerless harvest rate of approximately 1:1.5

Using the Average & Latest Expansion Rates Yields Very Different Predictions!

How Many Deer Overwinter does it Take to Achieve an Annual Harvest Goal of 440,000 Deer?

Overwinter Goal + Expansion rate = Prehunt

Prehunt – (Harvest + 15% Wounding Loss) = Overwinter Goal

$$440,000 + 66,000 = 506,000$$

**Using the DNR's 50 yr average Expansion Rate of 43%
The Overwinter Goal can be calculated**

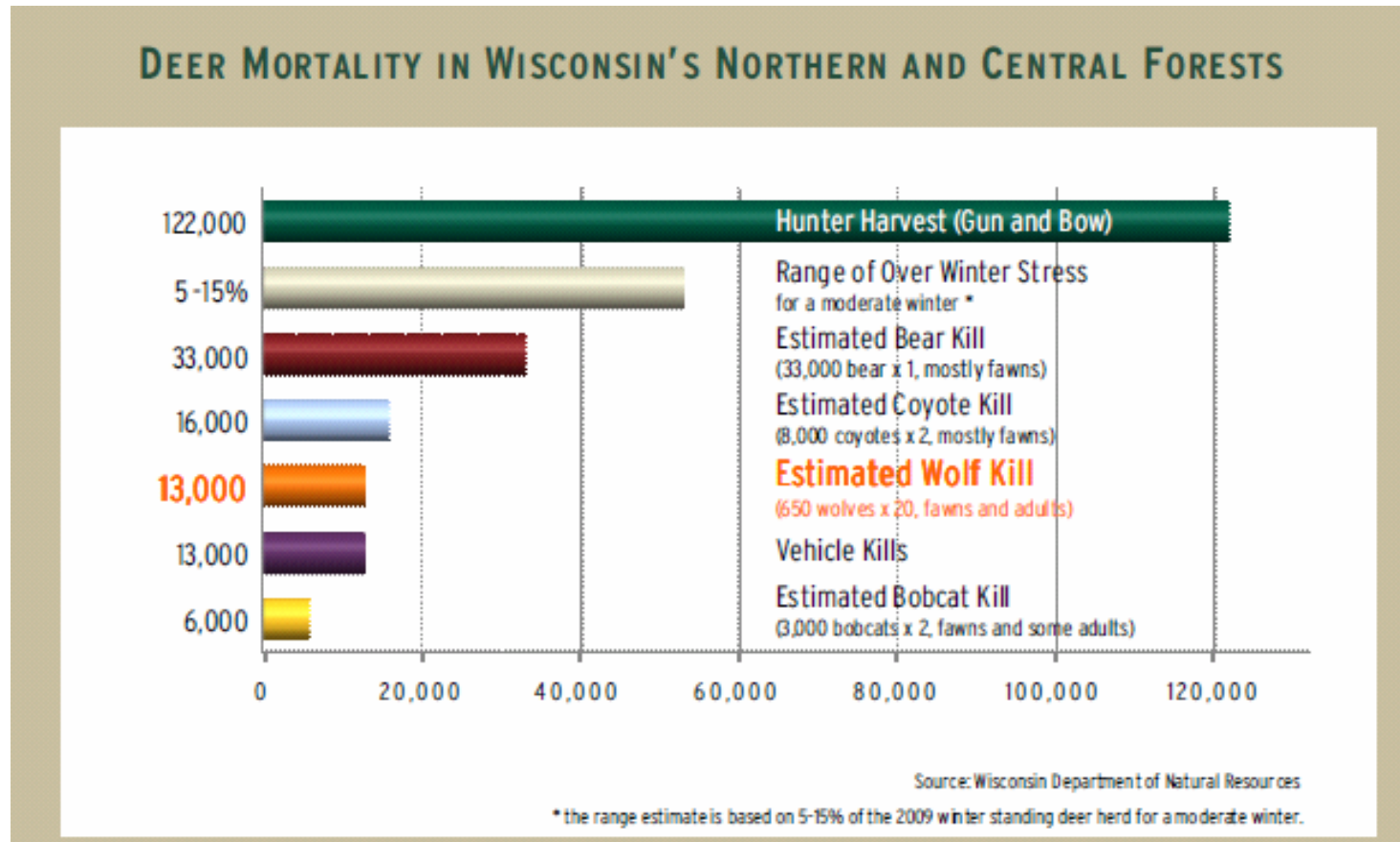
506,000 / .43% = 1,176,744 is the Overwinter Goal Necessary
to achieve an annual harvest of 440,000 Deer

**An Overwinter Goal of 1,176,744 Is Needed to Provide
an Annual Harvest of 440,000 Deer!**

*8 of the last 10 years, while crop damage and car kills have declined,
the state-wide overwinter population was > 1,000,000 deer*

Or Is It? – Not if Non-Harvest Mortalities are Considered!

Hunters are just one part of deer mortality as the following chart illustrates!



October 2009

*Fawn Mortality is Accounted For in the Population Estimates.
All Other Non-Harvest Mortalities are NOT!*

The Overwinter Goal Needs to Include Non-Harvest Mortalities.
Many of These Deer are NOT on the Landscape Year Round!

Hunters are Concerned About Environmental Effects!

One of hunter's biggest concerns is sustaining the hunting traditions. They want their children to have the same opportunities as they have had. Hunters know that they need to protect the environment!

Using DNR Numbers

The biological carrying capacity for the state is between 2,996,000 and 3,737,000 (Depending on low / high range in farmland units)

Note: There is little state-wide non-harvest mortality data. We encourage the study of non-harvest mortality so this data may be factored into overwinter goal setting.

1,176,744 Is a Very Conservative Goal With Respect to Hunter Satisfaction and Environmental Impact!

Prehunt and Posthunt Deer Population Estimates and Harvests, 1960-2006						
Year	Total harvest (gun,bow,tribal)	Prehunt Population	Statewide Posthunt	Posthunt Goal	Fawn Recruitment	Expansion Rate %
1960	62,096	369,021	297,611			
1961	39,885	411,933	366,066		114,322	38.4
1962	47,448	462,129	407,564	441,863	96,064	26.2
1963	67,214	633,501	556,205	441,863	225,937	55.4
1964	96,609	709,698	598,597	441,863	153,493	27.6
1965	103,740	701,914	582,613	441,863	103,316	17.3
1966	116,048	695,656	562,201	441,863	113,044	19.4
1967	136,119	707,087	550,551	441,863	144,886	25.8
1968	126,920	623,801	477,843	583,663	73,250	13.3
1969	103,995	561,878	442,283	583,663	84,035	17.6
1970	79,364	535,047	443,778	583,663	92,763	21.0
1971	77,357	576,881	487,920	583,663	133,103	30.0
1972	81,914	513,727	419,526	583,663	25,807	5.3
1973	90,561	580,700	476,555	583,663	161,175	38.4
1974	112,919	662,420	532,563	583,663	185,864	39.0
1975	130,966	674,465	523,855	583,663	141,903	26.6
1976	136,145	668,614	512,047	583,663	144,760	27.6
1977	148,700	777,618	606,613	583,663	265,570	51.9
1978	168,958	853,833	659,531	583,663	247,220	40.8
1979	141,588	723,059	560,233	583,663	63,528	9.6
1980	160,578	749,920	565,255	583,663	189,687	33.9
1981	195,756	871,173	646,054	596,495	305,918	54.1
1982	213,565	848,668	603,068	596,435	202,614	31.4
1983	231,119	851,705	585,918	596,840	248,637	41.2
1984	295,305	1,048,083	708,482	595,075	462,165	78.9
1985	316,426	1,018,049	654,159	594,955	309,567	43.7
1986	301,875	1,023,246	676,090	657,935	369,087	56.4
1987	296,010	1,092,295	751,883	689,070	416,205	61.6
1988	309,187	1,193,082	837,517	689,070	441,199	58.7
1989	360,330	1,299,553	885,173	695,005	462,036	55.2
1990	403,173	1,362,348	898,699	698,055	477,175	53.9
1991	424,556	1,289,781	801,542	698,400	391,082	43.5
1992	351,838	1,095,748	691,134	718,230	294,206	36.7
1993	273,056	1,152,128	838,114	718,230	460,994	66.7
1994	377,520	1,383,001	948,853	718,230	544,887	65.0
1995	472,196	1,664,725	1,121,700	706,346	715,872	75.4
1996	465,079	1,423,441	888,600	704,256	301,741	26.9
1997	362,975	1,226,321	808,900	704,146	337,721	38.0
1998	411,519	1,494,247	1,021,000	704,000	685,347	84.7
1999	497,670	1,662,987	1,090,666	704,000	641,987	62.9
2000	618,274	1,818,015	1,107,000	704,000	727,349	66.7
2001	446,957	1,503,365	989,364	742,200	396,365	35.8
2002	373,926	1,344,904	914,889	708739	355,540	35.9
2003	485,965	1,663,485	1,106,036	702324	748,596	81.8
2004	517,366	1,643,082	1,047,525	692079	537,046	48.6
2005	465,760	1,623,736	1,088,720	706000	576,211	55.0
2006	507,224	1,809,400	1,224,470	701756	720,680	66.2
2007	518,573	1,816,288	1,216,680	701756	591,818	48.3
2008	453,000	1,523,800	1,005,006	733,000	307,120	25.2
Average	443,507				Average	43.0