

# **White-winged Dove Status in Arizona, 2007**

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## **Historical Perspective**

In the last 20 years, white-winged dove populations in high-density nesting areas have been subjected to high hunting pressure, particularly during the 1960's when the bag limit in Arizona was 25 birds/day. In agricultural areas, white-winged doves appeared more vulnerable to over harvest than mourning doves (George 1993). A combination of high dove harvest in Arizona during the 1960's, destruction of river-bottom nesting habitat, and a shift in agricultural crops (substantial shifts from cereal grains to cotton and other non-food crops) (Cunningham et al. 1997) was associated with declining harvests. In response, bag limits were reduced (25/day to 10/day) in 1970. Continued harvest declines prompted further reduction in bag limits (to 6/day) in 1980-1981 where they remain. In 1988, season length was reduced from 3 weeks to 2 weeks and half-day shooting was implemented in 1989 (Fig. 1).

## **Call counts**

The Arizona Game and Fish Department has conducted a spring auditory survey, similar to the mourning dove call-count survey, since 1962. The index peaked at 52.3 in 1968 and decreased significantly during the next four years to less than 40. Indices have stabilized for the last 4 years, and drought is suspected as well as a lack of cereal grains to attract large numbers of doves to call count locations. Arizona is currently experiencing the greatest drought in recorded history. In 2007, the Call-count index was 24.6, virtually identical to the 2005 count of 24.7 (Fig 1).

## **Harvest**

Harvest Information Program Data were used for the following comparisons. Compared to 2005, both the harvest and the number of hunters hunting white-winged doves declined 14% in 2006. Total estimated harvest in 2006 was 56,500 birds. All indications from check stations and hunter contacts were that 2006 was an average to below average year for white-winged doves.

White-winged dove harvest is even more variable than mourning dove harvest since the season for white-wings is very short and migration is typically well underway when the season opens on September 1. When the birds remain in Arizona, they are available to hunter harvest. When the birds migrate early, harvest declines. Migration was typical in 2006 and few adult white-winged doves were taken during opening day check stations.

## **Literature Cited**

Cunningham, S.C., Engel-Wilson, R. W., Smith, P. M., and W. B. Ballard. 1977. Food habitat and nesting characteristics of sympatric mourning doves in Buckeye-

Arlington Valley, Arizona. Arizona Game and Fish Department Technical Report 26, Phoenix, Arizona, USA.

George, R. R. 1993. White-winged dove banding analysis. Final Report. Federal Aid Project W-128-R, Job 6. Texas Parks and Wildlife Department, Austin Texas, USA.

Table 1. White-winged dove September Season harvest statistics for Arizona 2002-2005. Data are from the Harvest Information Program.

Year	Hunters	Harvest	Hunter Days
2002	22,700	120,400	72,700
2003	23,000	112,300	75,500
2004	24,200	120,300	81,200
2005	21,600	110,100	65,700
2006	18,300	107,400	56,500

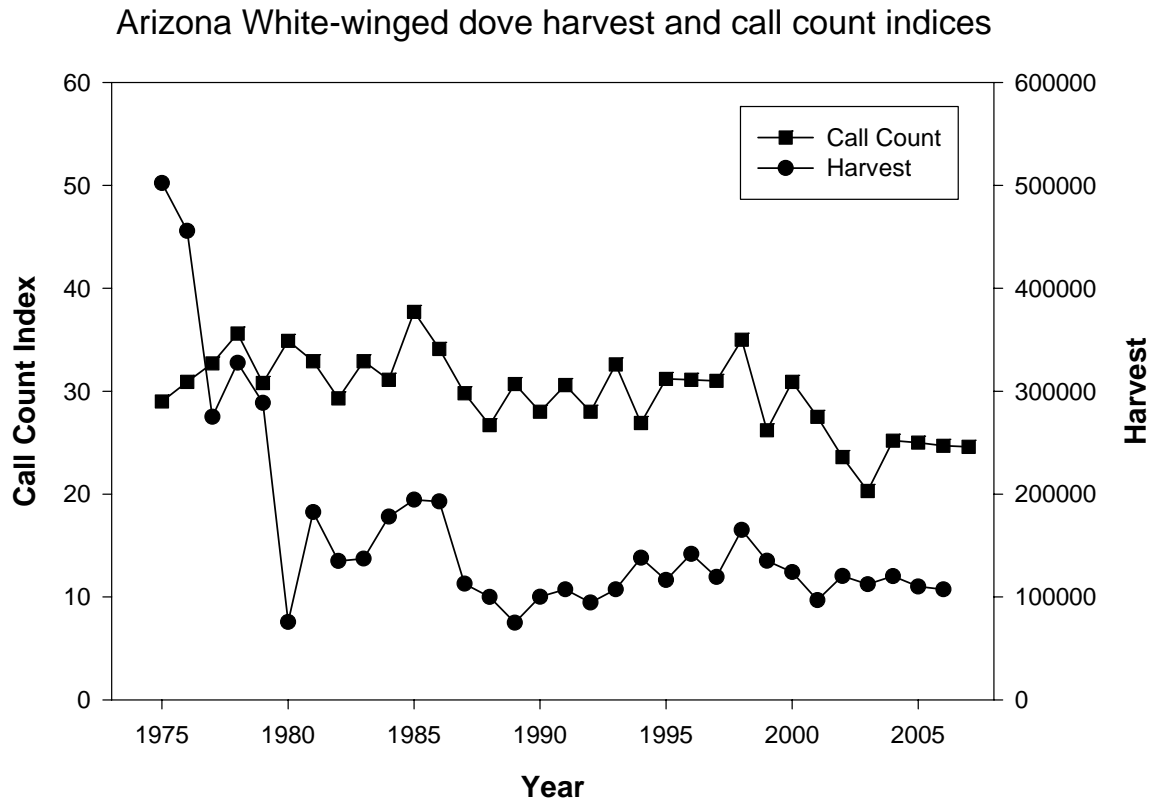


Fig. 1. Arizona white-winged dove call-count indices 1975-2007 and estimated harvest 1975-2006. Harvest estimates from 2002-2006 are Harvest Information Program estimates. Prior to 2002, estimates are from Arizona Game and Fish Department's small game questionnaire.