

Maryland Wood Duck Initiative 7 Years of Success

The Maryland Wood Duck Initiative (MWDI) is now in the midst of completing its 7th nesting survey on public land sites across Maryland. This all volunteer effort was launched in late 2004 after a Partnering Agreement was formed with MD DNR's Wildlife & Heritage Service. MWDI's mission was also embraced by the USF&W and DU as our other initial statewide collaborators. MWDI's focus has been to enhance MD's wood duck population and to improve the awareness of the wetland in habitats in which they depend. By developing and demonstrating the merits of "best practices" in public artificial nesting programs, MWDI has sought to encourage the use of such practices in private programs, thereby leveraging its efforts and maximizing the results. Complementary educational / youth oriented programs and events have also been integrated into MWDI's efforts and are growing at a measured pace. MWDI's "Total Wetlands Experience" has matured since our Sinkbox article in August 2007 as indicated below.



There are now 77 public lands sites as compared to 20 in 2004 involving 46 Western Shore sites (1,100 boxes) and 36 Eastern Shore sites (800 boxes). Total box capacity is less than the number installed plus the 2004 base because many boxes have been replaced and removed. MWDI is interested in establishing new sites by providing all materials as long as there is volunteer management already committed to manage the site and the habitat is suitable.

The 2010 final hatch numbers are likely to be slightly higher than 7,000. MWDI establishes a preliminary hatch estimate for a given season once about 90% of the boxes have been inspected. Certain nests are still "active" when final checks are made and some boxes are not accessible during late summer / early fall due to vegetative growth. Once inspection is feasible and the nests concluded, a reconciled estimate is made, usually when the current season preliminary figure is developed. Early estimates for the just concluded 2011 season suggest that a gain of 5-8% may have been experienced to some 7,300-7,500 ducklings.

Productivity has been raised from about 2.2 ducklings for each functional nest box to the

3.8-4.0 range. It may take 2-3 years for a project to "mature" where use levels and nesting productivity begin to approach expected levels in good brood rearing habitat. Thus, new MWDI sites often have an inherent lead/lag effect and generally cause a downward bias on average productivity. Many mature projects produce 6-8 ducklings per box on average.

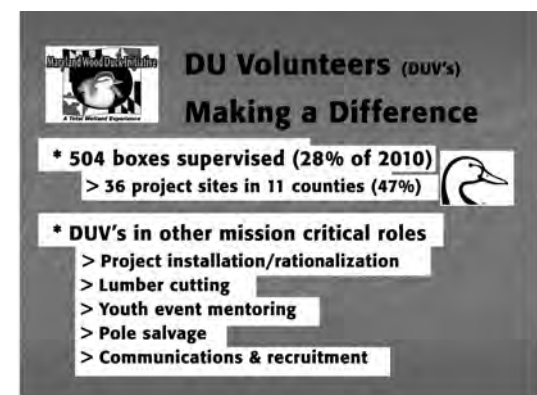
Key variables that impact productivity, especially over the past three years have been significant swings in water levels in early spring and then late summer and, perhaps, of greater importance, the change in the federal harvest limit to three 3 wood ducks from two. USF&W indicates that the 2008-09 wood duck harvest increase was within predicted levels - a 9.8% combined increase in harvested adult females in the combined Atlantic / Mississippi Flyways and 7.0% for adult males. The harvest increase in 2008 for NC, SC, and GA was up 21% in 2008 to some 237,000 wood ducks. (Most Maryland wood ducks are shot outside Maryland). These estimates contain a whole host of other cross variables but the net effect is that there were indeed fewer Maryland females returning beginning with the 2009 nest season. MWDI saw this in several projects where a significant reduction in box use and average clutch size were observed. In some cases, less nesting pressure (i.e. dump nesting) reduced nest strife and productivity actually rose. In the aggregate, however, the impact was discernable as the total hatch numbers suggest.

USF&W also estimates that Maryland's harvest in 2008 was only 7,700 wood ducks, and it has been declining from the 1999-2001 level of some 17-18,000. MWDI hopes to evaluate these statistics and USF&W's methodologies further as they imply several things.

At current harvest levels, assuming a 33% survival rate of ducklings, total Maryland artificial nest box production (including the guesstimates from some 6,000+ private boxes together with MWDI's tabulated results) might exceed this harvest level. Nationwide, it is readily assumed that nest box programs may account for some 3-5% of total "flyway" wood ducks. Maryland's contribution could be 33-40% if the USF&W profile estimates being generated are valid.

Regardless, with significant brood rearing habit in regions where cavity bearing trees are limited, Maryland has the opportunity, if not the reality, of having a meaningful portion of its wood duck population being hatched artificially. Hopefully, MWDI will have more to report on these issues on a subsequent Sinkbox article!

The support of numerous MD DNR, USF&W, County Parks and other public officials has been incredible. Besides facilitating access to habitat sites, these officials and their staff have routinely assisted in data collection, nest box installations and other logistics. Without this enthusiastic cooperation, MWDI could not function. DNR also manages MWDI's website (kudos to Linda Wiley) and the Partnering Agreement provides predator guards from the State Correctional System in Hagerstown and other related supplies. (mega kudos to Bill Harvey, Donald Webster, Larry Hindman and Hutch Walbridge in DNR's Game Bird Section). Metal poles have been salvaged from various State Highway yards and more than 25 sources have provided funding for box lumber which is assembled at various youth events annually. However, the inherent challenge MWDI faces is not money (no dues are sought); it is obtaining, training and sustaining dedicated volunteers to perpetuate its mission. Ducks Unlimited continues to play a vital role in MWDI's accomplishments.



If you have interest to volunteer in some manner, MWDI can design whatever time commitment you desire. There are several sites where project managers are needed involving anywhere from a 2 hour up to a 24 hour annual time commitment for a couple of larger projects. Project manager volunteers are encouraged to mentor or coordinate some youth involvement in managing their sites as feasible. Increasingly, MWDI can also arrange for annual corporate community service outings. Inspecting boxes is a great way to get outdoors and experience numerous wildlife and wetland wonders that other people only read about.

For information on MWDI, nest box plans, best practices, access to predator guards, productivity summaries and many other things, visit MWDI's website (www.mwdi.net). DU's email newsletter contains a reference to MWDI's activity reports when they are published. For more information, contact Cliff Brown (cliftonabrown@aol.com) or call him at 7043-447-5142.