

WILD HARVEST INITIATIVE®

A Program of conservation VISIONS®

QUARTERLY UPDATE

SEPTEMBER 2018



We are pleased to welcome the Pope and Young Club to the Wild Harvest Initiative® Partnership Alliance and to announce the launch of our first Wild Harvest Sharing Survey in the state of Texas

MALLARDS ARE HARVESTED ACROSS A WIDE RANGE OF JURISDICTIONS IN THE UNITED STATES AND CANADA AND ARE A SIGNIFICANT FOOD SOURCE DESPITE THEIR MODEST SIZE

SPECIES PROFILE - MALLARD

Harvest in Canada

The Wild Harvest Initiative® database contains harvest data for mallards from all Canadian provinces and Territories for the study period 2014-2015 and 2015-2016. However, our database indicates that no mallard harvest occurred in the Yukon, Northwest Territories, or Nunavut during this time.

Across Canada, the total harvest of mallards for the 2014-2015 and 2015-2016 seasons totals 1,037,811 animals. This harvest represents an approximate live mass of 1,184,142 kg (2,610,587 lb) and an estimated 335,243 kg (783,176 lb) of consumable meat. Given an average serving size of 4 ounces, this meat would

have provided more than 2.9 million meals to Canadian households.

Harvest in the United States

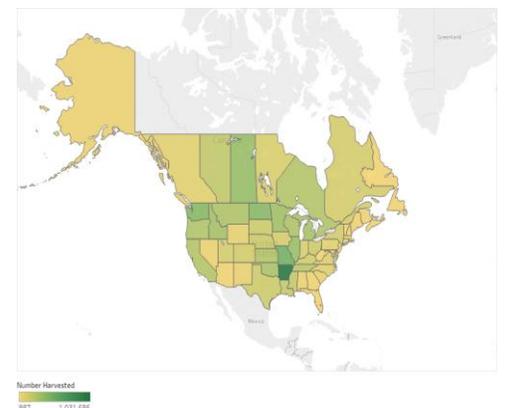
In the United States, mallards are currently harvested in all 50 states. Our database indicates the U.S. harvest for the study period 2014-2015 and 2015-2016 totals 7,337,377 animals, more than 7 times greater than the Canadian mallard harvest for the same period.

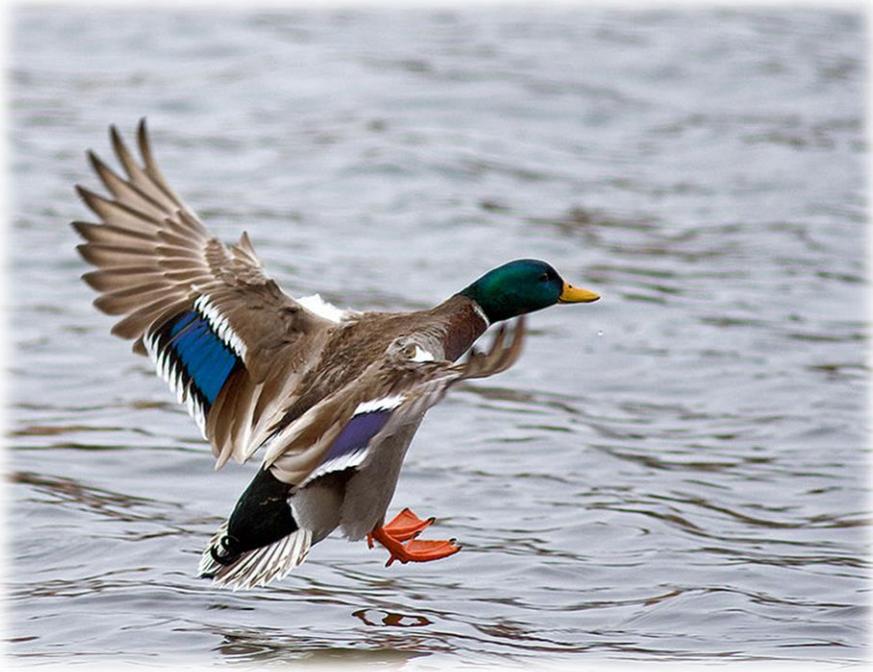
The largest jurisdictional harvest in the U.S. occurred in Arkansas with over 500,000 mallards taken in each of 2014-2015 and 2015-2016. The total U.S. harvest represents an approximate live mass of 8,371,947 kg (18,456,984 lb) and an estimated 2,511,584 kg (5,537,095 lb)

of consumable meat. This is enough meat to provide more than 22 million standard 4 ounce servings to American families.



Figure 1: Wild Harvest Initiative® Database Harvest Density Map for Mallard (*Anas platyrhynchos*) in the United States and Canada.





An International Delicacy

Mallards are eaten and enjoyed throughout Canada and the United States. Their meat is described as dark, rich, flavorful, and high in nutritional content. A standard 4 ounce serving of skinned wild mallard breast meat contains only 136 calories, fewer calories than are contained by an identical serving of chicken breast. The meat is very high in protein, with just over 21 grams per 4 ounces, and is also low in fat, with approximately 5 grams per standard serving. In addition to its high protein and low fat content, mallard meat is also packed with vitamins and minerals. A standard serving contains 21% of an average adult's daily recommended intake of iron, 15% of riboflavin, and 23% of thiamin.

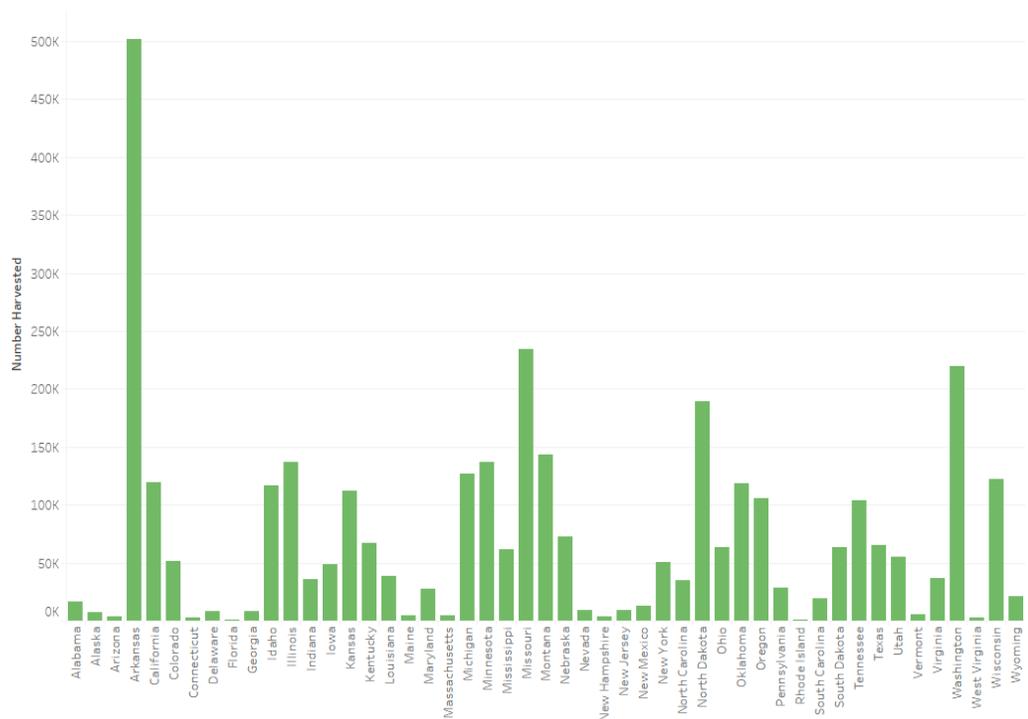


Mallard: Species Profile

- *Anas platyrhynchos*
- Mallards are thought to be the most abundant duck species on earth.
- They can fly up to 55 miles per hour.
- Males have green feathers covering their heads whereas females are completely covered in tan and brown plumage.
- The average lifespan is 3-5 years, though one mallard was recorded to have lived for at least 27 years.
- Mallards generally fly to elevations of 10,000 feet or less, but have been known to fly higher than 20,000 feet.
- A mallard feeds by tipping its body forward and lowering its head and neck below the water to nibble through mud or algae for food.
- Only females make the familiar “quack” sound; the males’ call is much softer and subdued.

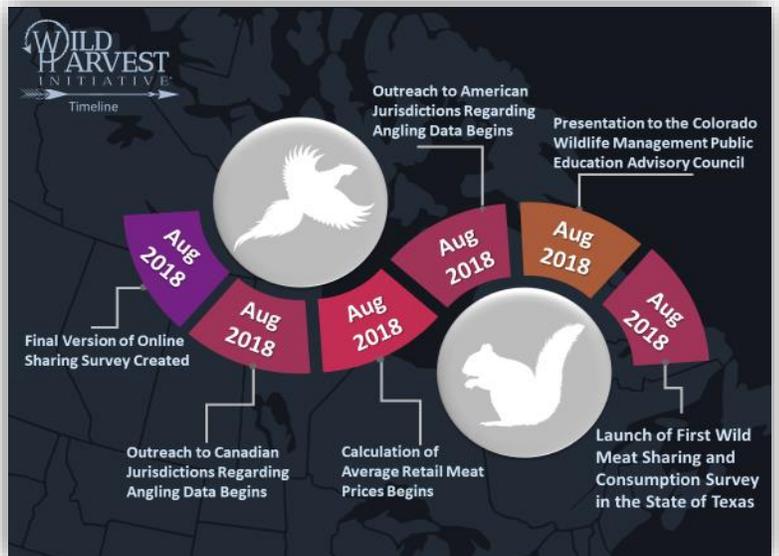
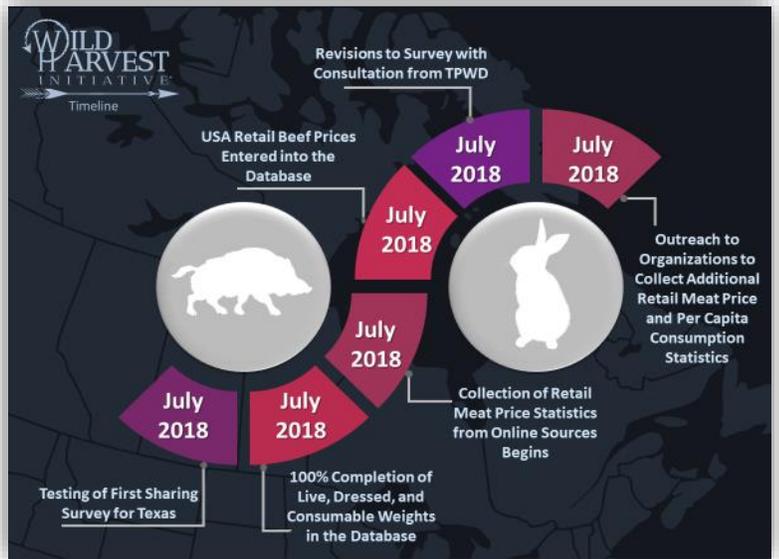


Figure 2: USA Mallard (*Anas platyrhynchos*) Harvest by State Across the 2014-2015 and 2015-2016 Seasons



PROGRESS TRACKING

In 2017 the Wild Harvest Initiative® team integrated a progress tracking system into the project management plan. This progress tracking system consists of two main elements, a detailed timeline and a Gantt chart. The timeline features numerous categories such as planning and design, outreach and marketing, human resources, partner activity, data collection, data entry, data verification and integrity, and data analytics. This system allows the team to optimize utilization of project resources and improves our ability to report and plan strategically.



WILD HARVEST INITIATIVE® DATABASE

Quality Assurance

Hunting harvest estimates have been refined in accordance with returned jurisdictional harvest verification forms, as per our Quality Assurance plan. We have now received completed forms from 59 of 63 jurisdictions.

Weight Calculations

Equations for the calculation of live, dressed, and consumable weights for all 128 species for which harvest information is available in the Wild Harvest Initiative® database have been derived and tested.

Subsequently, live weights, based on demographic type (male, female, antlered, antlerless etc.) have been calculated for every species and entered into the database.

Dressed and consumable weights have also been calculated and entered for all regularly consumed species.

As weights were refined, so were live biomass estimates. The total live biomass estimate for wild harvested meat in the United States and Canada for the study period 2014-2015 and 2015-2016 now stands at 1,316,432,902 kg (2,902,237,755 lb).

Economic Value

During the last three months, the WHI Team has been researching and collecting economic data on commercial meat values across Canada and the United States.

The Team has corresponded with senior individuals at the U.S. Department of Agriculture's Economic Research Service (USDA ERS) and has also collected pricing data from the USDA ERS on the average composite U.S. retail prices of

beef, pork, and broilers, as well as average U.S. retail prices on a variety of chicken and turkey cuts including legs, breast, and whole birds.

The team has also contacted various organizations in Canada such as CANFAX, Agriculture and Agri-food Canada, and Statistics Canada, as well as a variety of other organizations in the food industry to determine the availability of price statistics in Canada, and has compiled Canadian retail prices for 6 cuts of beef, 4 cuts of pork, and the average price of porkchops and bacon. The team has also compiled Canadian retail prices for fresh and frozen whole chickens and turkeys, as well as for various additional cuts including legs and breast.

Throughout this consultation process, additional information was sought from organizations in both the U.S. and Canada regarding which statistics would be considered most viable for use as a benchmark pricing tool for economic analysis.

Entry of economic data into the database is ongoing and the Team is working to derive an estimate of the minimum economic value of wild harvested meat for the study period 2014-2015 and 2015-2016.

Replacement Values

The team has begun to compile statistics to inform calculations and analyses of domestically produced replacement values for wild harvested protein in the U.S. and Canada. Statistics pertaining to the amount of land, water, and feed required to raise domestic livestock have been gleaned from a variety of academic publications by UNESCO and other science-based organizations, while statistics on greenhouse gas emissions

produced by domestic livestock have been procured from the Food and Agriculture Association of the United Nations and the United Nations' Global Environmental Alert Service.

Consumption Patterns

The WHI Team has also begun to compile statistics on the per capita consumption of various types of meat in the United States and Canada. These consumption patterns will be used to determine an average meat consumption profile for both countries which may be used in the calculation of the economic value as well as the determination of the replacement value. Preliminary consumption statistics are shown in figures 3 and 4.

WILD MEAT SHARING AND CONSUMPTION INDEX

The WHI Team has recently made significant advancements in the establishment of our Wild Meat Sharing and Consumption Index. Over the last three months, the team has worked extensively with staff at Texas Parks and Wildlife Department to launch the first Hunter Sharing Survey in the state of Texas.

The survey has been designed to measure the sharing and consumption of wild harvested meat both within and outside the harvester's household. Survey questions pertain to the amount of meat harvested, the amount of meat shared, the number of individuals with whom the meat was shared, motivations for hunting and sharing, and general demographics.

Following a significant consultation and review process, the scope of the survey was finalized and an online form was created using SelectSurvey software.

Extensive testing was performed to ensure functionality, as well as proper survey logic and question flow. Survey methodology has been documented.

Survey data analysis is scheduled to begin during the next quarter, once initial results become available.

The WHI Team has expanded outreach efforts to charities, foodbanks, and other organizations likely to have knowledge and/or experience with the charitable donation of wild harvested meat. To date, we have compiled a list of more than 180 contacts. The Team is also contacting jurisdictional representatives from state and provincial agencies to investigate the legalities of wild meat donation in individual states and provinces.

Recreational Angling Data

The WHI Team has expanded its research and outreach efforts to gather recreational angling harvest data in Canadian and American jurisdictions. We are currently focusing on procuring jurisdictional harvest estimates, creel survey data, and license sales data. To date, the Team has received responses from 28 of 63 jurisdictions contacted.

Of the 28 respondents, most do not compile any jurisdictional level estimates of recreational angling harvests and have only creel survey data available. Creel survey data are not suitable for extrapolation to statewide harvest estimates. Please refer to figure 5 for a detailed breakdown of progress regarding recreational angling harvest data collection.

The WHI team has also engaged in preliminary consultations with the American Fisheries Society concerning statistical modeling, since this will likely be required given the limited amount of recreational angling harvest data available. In response, the American Fisheries Society has proposed formation of a Wild Harvest Initiative® working group and this will be explored further during the next quarter.

WILD HARVEST INITIATIVE® PARTNERSHIP ALLIANCE

New Partners

During the last quarter, the Wild Harvest Initiative® Partnership Alliance welcomed a new Partner, the Pope and Young Club, one of North America's leading

bowhunting and conservation organizations.

The Alliance now features 29 diverse members, representing NGOs, government agencies, the outdoor industry, and private individuals.

Pending Partners

During the next quarter, we expect to finalize partnerships with Colorado Parks and Wildlife and Arizona's Game and Fish Department.

COMMUNICATIONS

A professional marketing/public relations firm, Revolve Marketing of Halifax, Nova Scotia, has been selected to carry out work on a standalone website for the Wild Harvest Initiative®. This work is ongoing.

We continue to update informational and promotional materials to showcase new partnerships, project implications, results, and relevancies. Promotional outreach remains ongoing as we consistently engage with media, academia, special interest groups, the Wild Harvest Initiative® Partnership Alliance, and the broad public to disseminate awareness and increased understanding of the Wild Harvest



Figure 3: Per Capita Consumption of Meat in Canada

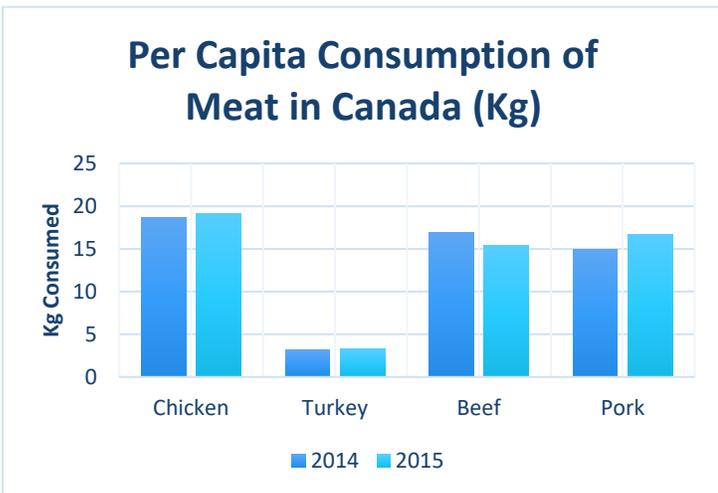


Figure 4: Per Capita Consumption of Meat in the United States

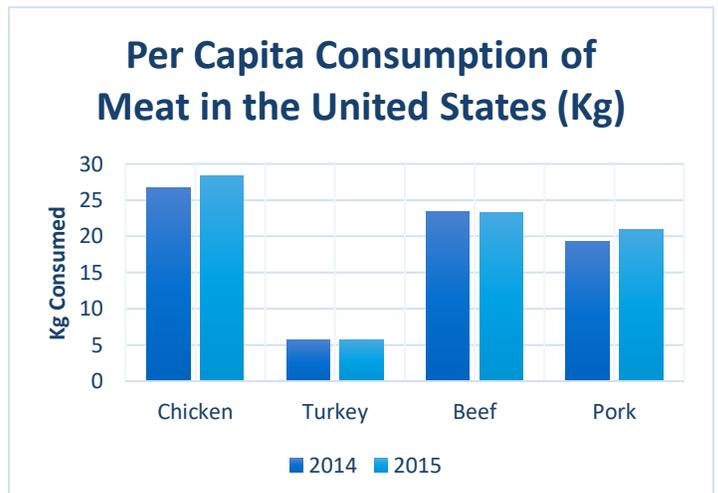
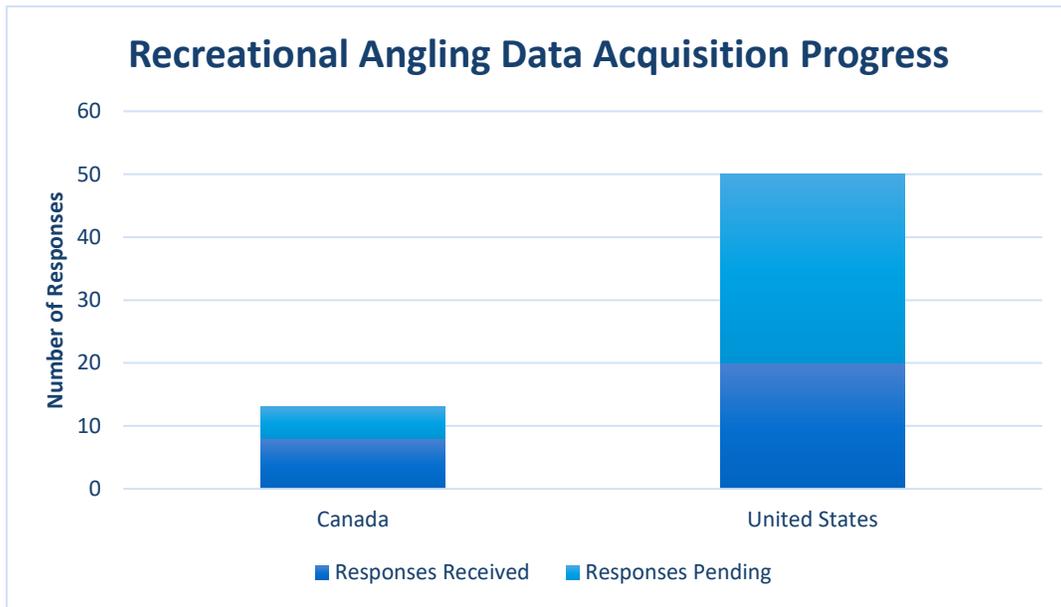




Figure 5: Recreational Angling Data Acquired Across the United States and Canada



Initiative® and the myriad benefits of sustainable wild harvest.

Highlights from the past 3 months include a partner presentation to the Florida Fish and Wildlife Conservation Commission, a presentation to the Colorado Wildlife Management Public Education Advisory Council, and the release of a new video for social media. Our social media pages now boast a combined following of more than 550,000 individual users.

Press Releases:

White-tails Unlimited:

<http://www.theoutdoorwire.com/story/5a71893b-5b19-4616-98e3-7e746c601314>

Pope & Young Club:

http://pope-young.org/information/news_detail.asp?news=144

Back Country Hunters and Anglers:

<https://www.prweb.com/releases/back-country-hunters-anglers-joins-wild-harvest-initiative-partnership-alliance/prweb15635572.htm>

Web links to media mentions:

<https://gearjunkie.com/best-hunting-podcasts-offseason>

<https://www.americanhunter.org/articles/2018/7/28/why-donating-venison-matters/>

Videos:

The Empathy we Share:

https://www.facebook.com/ShaneMahoneyConservationist/videos/918302118356549/?hc_ref=ARQF-hrpk7ow7hxStW7JOn1JpXUmQtD5PPGJgQEolPTlczrcFU1zJwx2GEla3metEHQ



THE WILD HARVEST INITIATIVE® PARTNERSHIP ALLIANCE

