



# 2020 Wachusett Deer Hunt Orientation

*Incorporating wildlife management into forest resilience  
at Wachusett Reservoir*

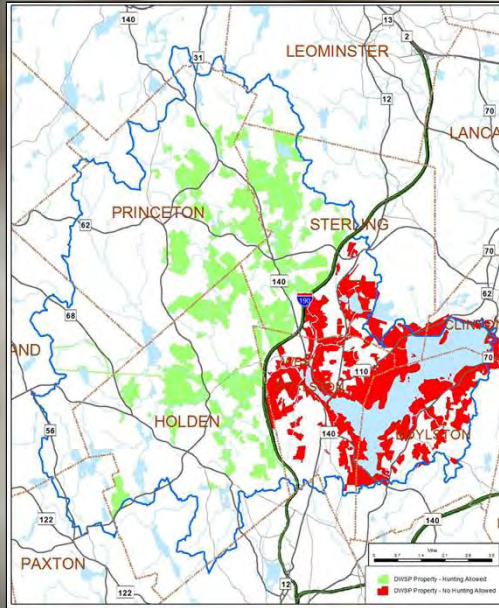
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DWSP Director of Natural Resources  
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Good evening and welcome to the 2020 Wachusett Reservoir Zone Deer hunt Orientation. My Name is Ken MacKenzie and I am the Director of Natural Resources for the DCR Division of Water Supply Protection.

My email address is provided on the bottom of the screen and again on the last slide for any additional questions that may come up after the Orientation is over.

The plan for the evening is to give you a brief background of why we are hunting at Wachusett, where you can hunt at Wachusett and go over some of the rules that may be different from your normal hunt. We will also go over some of the tools available to you for a successful hunt.

## Hunting in the Wachusett Watershed



1996: 2-year pilot hunting program

- West of Rt. 190
- Formalized in 1998

Since 2000: deer impact has been increasing

- Suburban environment
- Refuges
- Continue to buy land





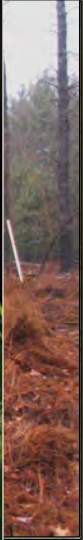


Hunting was prohibited on Division lands in the Wachusett watershed for a majority of the last century. In 1996, the Division initiated a 2-year pilot program that allowed hunting on most Division lands in the watershed WEST of Interstate 190. Within the next two years, the Division formalized its hunting program and hunting has been allowed west of I-190 ever since.

However, since the year 2000, deer populations in the suburban areas around the Wachusett Reservoir were expanding. White-tailed deer thrive in fragmented, suburban environments where there is enough cover, abundant food and fewer predators. The un-huntable lands east of I-190 served as refuges for deer during the time when they are most vulnerable- hunting season. Confounding the issue is that many parcels have been acquired recently by DCR that were traditionally hunted under their prior ownership. However when DCR purchased any land east of Rt 190, hunting was prohibited by default.

Before the 1<sup>st</sup> hunt in 2018, there were 7000-acres in the NO HUNTING Zone that are owned by the Division.



## Hunting in the Wachusett Watershed


Land currently hunted (west of Rt. 190)

- 9,650- acres
- 9 deer/mi<sup>2</sup>

Concerns in non-hunted areas

Long-term monitoring

- Exclosures (2015)
- Deer Density (2016, 2018)



The area in the Wachusett watershed that was historically hunted has seen little impact from deer.

However, as we move into the Division's land east of I-190, we were getting a different picture. The deer density was much higher and the impact is more severe. Recent surveys in the unhunted areas raised concerns about the forest's ability to thrive and regenerate. Given the lessons learned at the Quabbin Reservation, Division staff are primarily concerned with the impact high deer densities have on tree regeneration and growth within the unhunted areas.

The forests of our Watershed lands act as a filter to the water. This is **important**, because by participating in this hunt not only are you being given a good opportunity to hunt, but you are conservation agents for water quality for 3 million people.

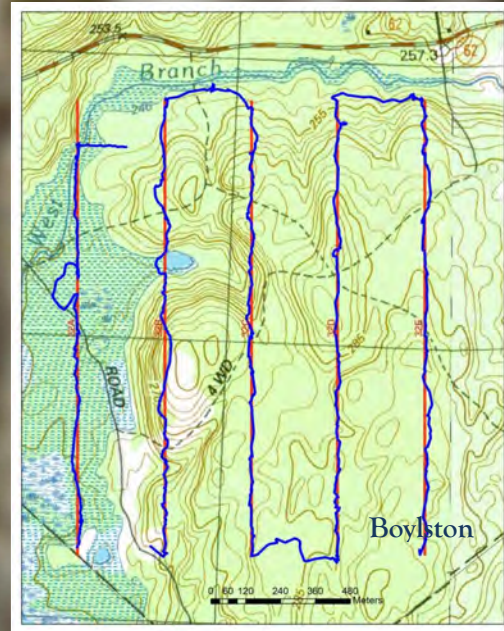
As a result of the lack of forest regeneration, DWSP has initiated some long-term monitoring efforts, including the installation of three deer exclosures to monitor browse impact and deer population monitoring using pellet group surveys.

## Wachusett Watershed Deer Density Estimate- 2016, 2018



Justice Hill  
(Sterling/Princeton)

Poutwater  
(Holden)

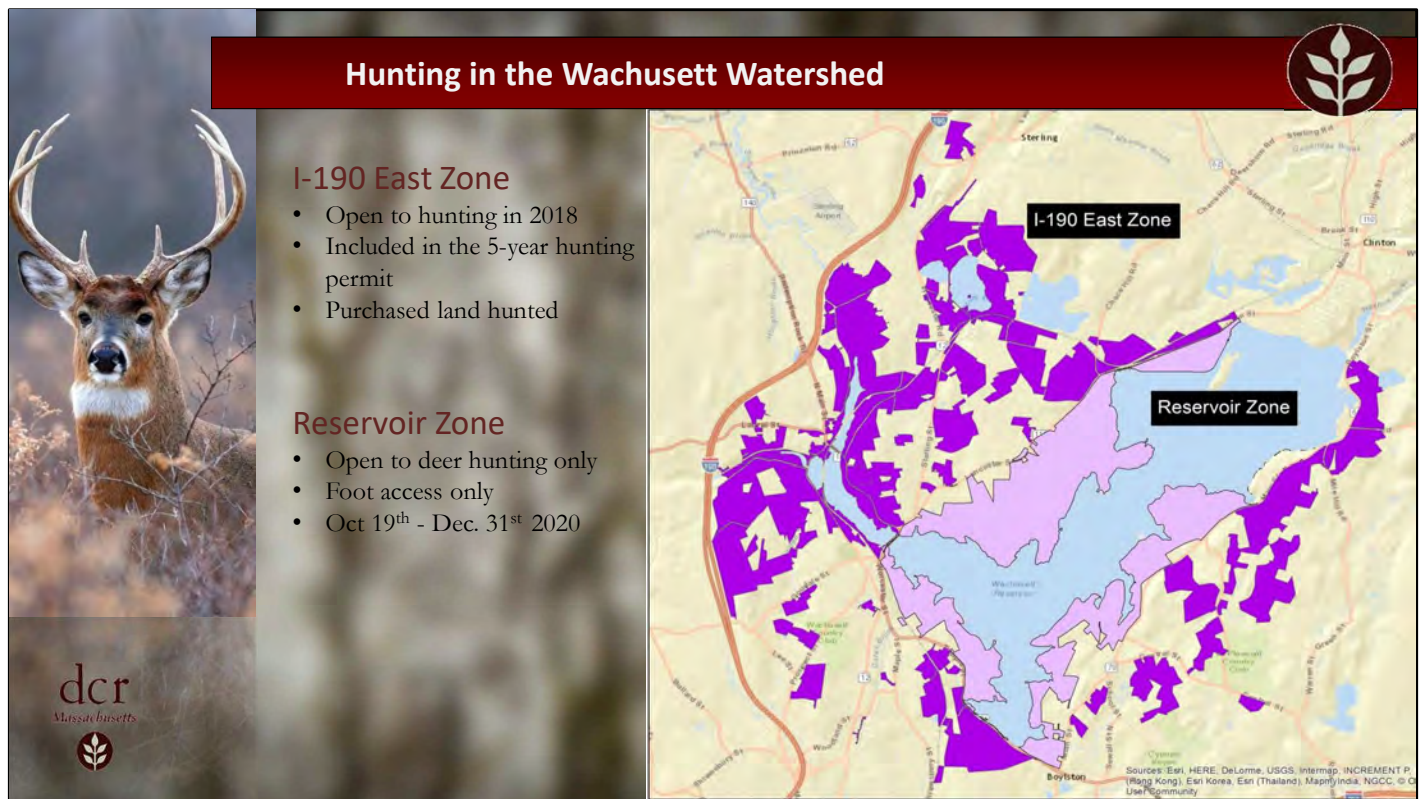


DCR Natural Resource and Forestry staff began a pilot study in 2015 to investigate whether a Pellet-Group Count Survey on watershed lands could provide insight into the number of deer and moose using DCR property.

The technique is straightforward and can be done without a large investment of time and resources. You basically walk transects through the designated areas and at measured distances, stop and count the number of pellet groups you see within a 4-foot radius of your point, and extrapolate a density estimate using a formula created by scientists.

In 2016 and 2018, DCR foresters and biologists surveyed the watershed from Feb through mid-April- walking over 35 miles. We covered 4 different areas surrounding the Reservoir including areas in the NO HUNT Zone in the towns of Boylston, West Boylston and Sterling as well as areas that had been hunted since 1996 (Poutwater in Holden and Justice Hill, Sterling/Princeton). We then compared the results of the unhunted deer density to the lower density in the historically hunted areas.





As a result of these studies, in 2018 the Division expanded its hunting area into two new Zones.

#### I-190 East Zone: shown in dark purple.

- This is open to all types of hunting during any hunting season, except **no dogs** may be used for hunting in this zone.
- These nearly 1000-acres are included in the 5-year Wachusett Watershed permit.
- In the future, if the Division purchases land within this zone, it will become (or remain) huntable following MassWildlife's Wildlife Management Zone restrictions.

#### Reservoir Zone: shown in light purple.

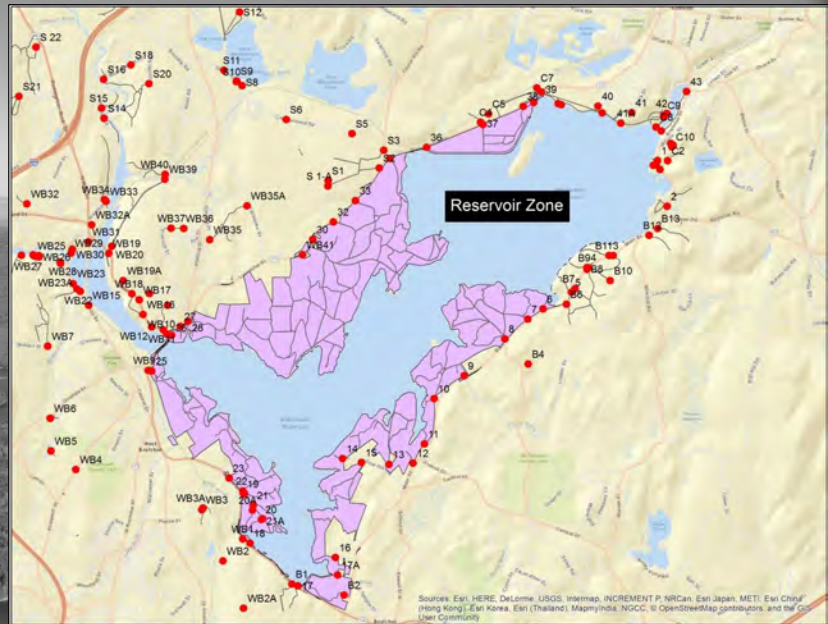
- Open to Deer hunting only
- Hunters will be required to walk into this zone from one of the existing gate locations or designated parking spots.
- *In 2020, we have expanded the hunt to include all 3 seasons:*
  - Archery Season (Zone 9): Oct. 19 - Nov. 28
  - Shotgun Season: Nov. 30 - Dec. 12
  - Primitive Firearms Season: Dec. 14 - Dec. 31
- Hunters must apply for a Reservoir Zone permit and attend an orientation to hunt this Zone.

## Deer Density in the Wachusett Watershed



### Reservoir Zone:

- Interior Gates
- Deer Density well above 20 deer/mi<sup>2</sup>
- Proximity to Reservoir
- 2,840 acres



### Reservoir Zone:

Includes all of the Interior Gates within the boundary set by Routes 110, 12, 140, and 70.

The primary concern in this zone is overabundant deer impacting tree regeneration and growth. The science says that a deer population over 20 deer/mi<sup>2</sup> can have significant impact on forest regeneration.

An additional concern is this zone's proximity to the Reservoir (where we need to protect our natural filter the most). This should be our most protected area for water quality. Because this area is sensitive, we have decided to control the access to the Reservoir Zone.

There are 2840-acres of open huntable lands delineated in pink on this map. There will be over 300 hunters permitted to hunt this Zone. If everyone showed up on the same day, that's about 1 hunter per 10-acres. If last year was any indication, we had about 60 or less hunters across the area on a given day. That works out to be about 1 hunter per 50+acres.

We realize that some days will be busier than others and every hunter will not be equally spaced, but there still should be plenty of room for everyone-especially with the longer season. That being said, please have a back-up plan if you get there and there is someone in your "A" spot.





**HUNTING SEASONS:**

- ARCHERY SEASON: October 19<sup>th</sup>-Nov 28<sup>th</sup>
- SHOTGUN SEASON: Nov 30<sup>th</sup> - Dec 12<sup>th</sup>
  - Ammunition: **Slugs only**. No buckshot
- PRIMITIVE SEASON: Dec 14<sup>th</sup>- Dec 31<sup>st</sup>

**ACCESS PERMITS:**

Emailed to you  
Place permit placard for EACH HUNTER on dashboard before you head out in the field

- The other permit should be with you while you are hunting

**THE BAG LIMIT:**

- Can take whatever combination of permits you possess.
- Bucks: must use your buck tags (can use both tags here)
- Antlerless: Limit to 2 antlerless deer/hunter (with permits)

As a permitted hunter, you may hunt any/all of the deer seasons. When using a shotgun, you must **use slugs only**. Additionally, even though it is “shotgun season” you will be permitted to use a muzzleloader or bow during this timeframe. Finally, although there are other hunting seasons open during shotgun season, this permit allows you to hunt deer ONLY.

#### **Access Permits:**

These permits will be emailed to you after completing the Orientation

There are two parts to your permit- one for your car and for yourself.

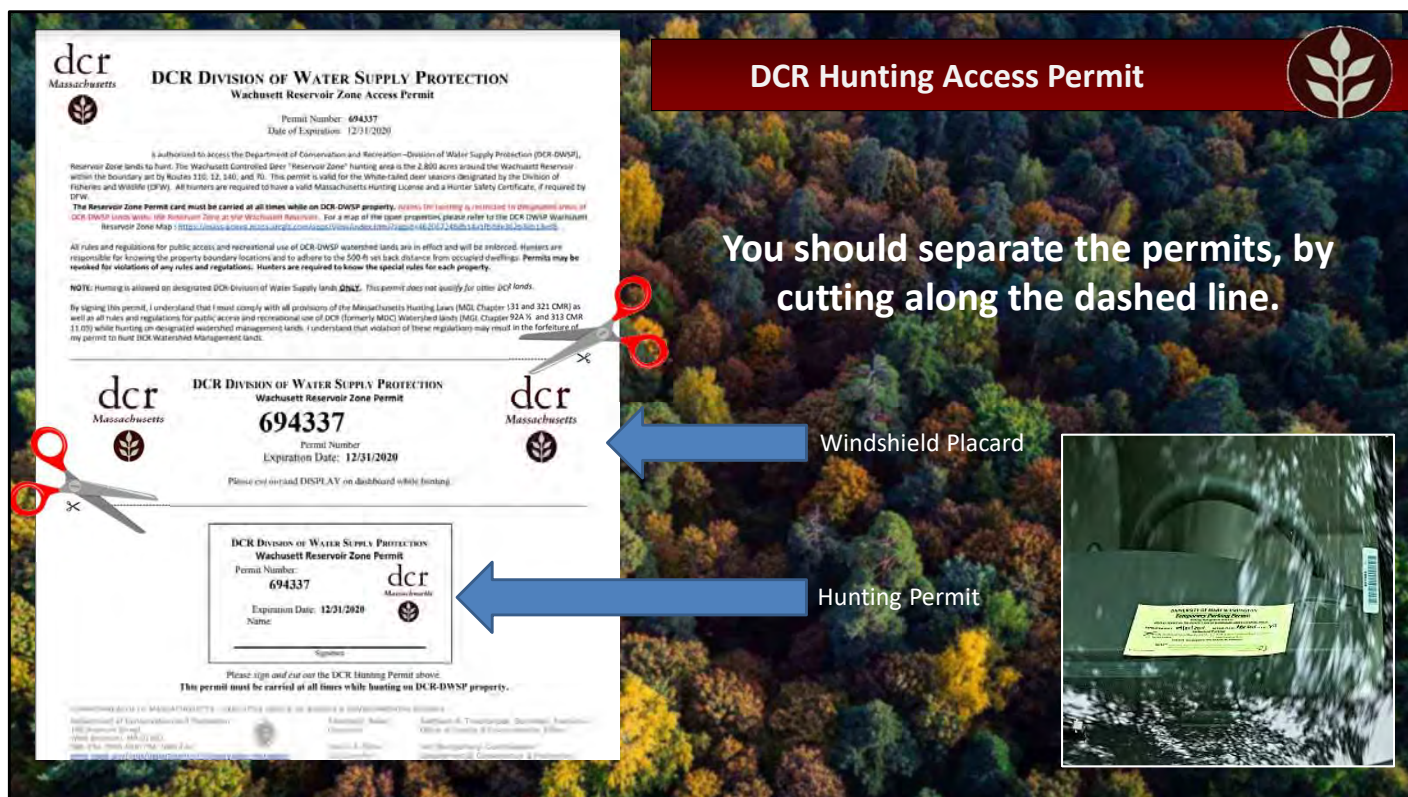
- These permits are valid for the person listed on the permit- ONLY. If you decide that you cannot hunt, you cannot transfer the permit to anyone else.

#### **Bag Limit**

You may shoot a deer based on what permits you possess. You may shoot two deer before you check them in or report them via online check stations.

If you want to shoot a buck, you must use your buck tags. If you want to shoot a doe or button buck, you must use your Reservoir Zone Antlerless Tag. These are available through the MassFishHunt website beginning October 5<sup>th</sup>. You must buy one permit and you have the option to purchase another.

Your Zone 9 antlerless tags cannot be used in the Reservoir Zone. Save those for other properties within Zone 9.



When you get your permit emailed to you, you should print it out and keep in a safe place. If you do not receive your permit within a week of this orientation, please check your spam folder of you email. Sometimes your email client will mark it as SPAM. The email will come from [DCRNaturalResources@gmail.com](mailto:DCRNaturalResources@gmail.com).

As we get closer to the hunt, you should separate the permits, by cutting along the dashed line.

- The top one has only your permit number- which is the same as your Customer ID number. This should be placed on your windshield- one permit for everyone that is hunting with you. This will allow Rangers to see that you are allowed to be hunting. It can also aid the rangers and police in a search and rescue operation if you do not return to your vehicle after hours.
- The lower half of the Permit, is the card you should be carrying with you while you are hunting in the Reservoir Zone. This will help identify you as a legal hunter at Wachusett.
  - You can keep it in your wallet or hunting pack. You should put it in a sandwich bag or even laminate it to make sure it doesn't get ruined. If you lose it, you can email me for a replacement.



# Scouting



- **ANYTIME!**
  - Open to the public
- **NO Vehicle scouting**
- **No firearms**



A large part of successful deer hunting is doing your homework.

The Reservoir Zone is open to scouting at any time. The DCR properties are open to the public and you can be in there year-round.

For anyone that has hunted our Quabbin property, vehicle scouting is not available for this hunt. You can walk in from any of our gates.

And it should be obvious, but there are no firearms allowed while you are scouting.

# Scouting

- **ANYTIME!**
  - Open to the public
- **NO Vehicle scouting**
- **No firearms**



**Can set up (temporary) tree stands/trail cameras prior to hunt-**

**Stands: 30 Days Prior**

**But at your own risk**

**Must be tagged with last name and Hunter ID  
removed immediately after hunt**





# DCR Property

- Hours are from 1-hour before sunrise to 1-hour after sunset
  - Strictly enforced

The property is open to the public during the hunting season

- People walking the roads
- Staff working
- Gull Program
- Fishing

Do not BLOCK gates.

Additional Parking areas at  
Gates 28 and 30



Property Hours: Are 1 hour before sunrise to 1 hour after sunset

**This is strictly enforced.** One of our other important user groups is our fishermen and women. They want to be in there just as early as you do. But they also must abide by our rules. If a fisherman sees you going in early, they will report you.

I mentioned this when we were talking about Scouting, but its important to note that during hunting season the property is also OPEN to the public. There will be signage up at the gates that let the public know that it is hunting season and they should be wearing hunter orange.

On the plus side... if you shoot a deer, you can get help from someone to drag a deer out. You may call a non-permitted hunter/friend to help you.

As long as they are not carrying a firearm, they are allowed to be on the property without a permit.

Staff may be working in the area as well. We may have staff sampling steams or road crews out there clearing downed trees or plowing some of the roads.

Additionally, we have a Bird Harassment Program that occurs during the fall/winter months that require staff to be out on the shoreline and sometimes in a boat. This Program harasses gulls and geese from roosting overnight on the reservoir and includes the use of pyrotechnics sure as bangers and screamers. So if you hear these noises... that's what is

going on. The Program usually operates a few days a week but it may expand to more nights as needed (i.e. large numbers of birds). The good news is that deer are used to the sound of loud bangs and may not be scared of gunshots.

The Wachusett Reservoir is an outstanding place to fish. We have a dedicated number of fishermen that take pride in keeping the Reservoir clean and safe. They will be walking on the roads and fishing from the shorelines. Fishing is open until November 30<sup>th</sup>.

Please do not block the gates when parking. The Rangers need access to the gates for regular patrols and in the case of an emergency. If your car or truck is blocking a gate, it will be towed.

You can look at the online map for the Reservoir Zone to see how much parking there is at a given gate. There are additional, larger parking areas at Gates 28 (intersection of Rt. 12 and 110) and Gate 30 on Lancaster St (Rt. 110).



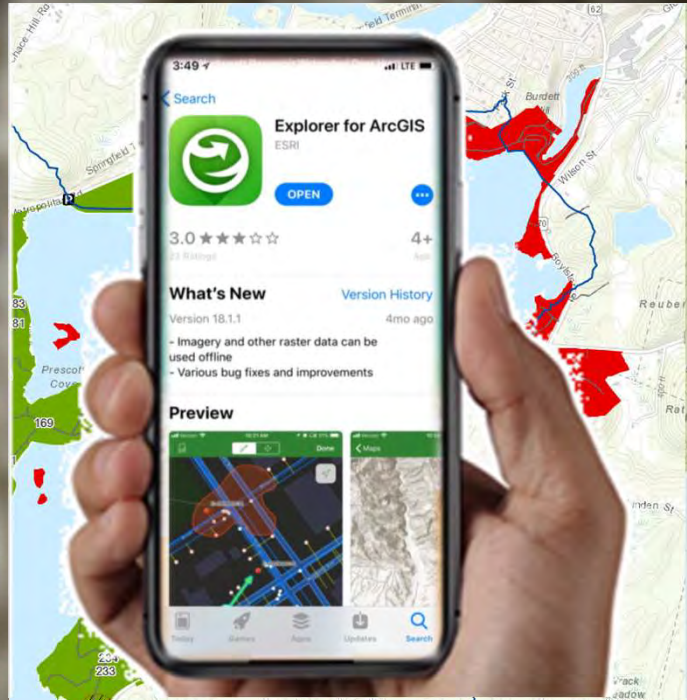
## Reservoir Zone Interactive Map

- Wetlands and topography
- Interior Roads and Intersections
- 500 ft. set backs (Including archery)

### Restricted areas

Use online map on your home PC  
Also Accessible on your mobile device

- Mapping App
  - **EXPLORER for ArcGIS**



One of the tools you will have as a hunter in the Reservoir Zone is a great mapping tool that you can bring with you in the woods.

The Reservoir Zone Interactive map has topography, wetlands and the all the interior fire roads. The intersections of these roads are all marked with a number in the field that corresponds to the map to let you know exactly where you are.

We have also buffered any occupied dwelling the required 500 ft no discharge distance, so you have an idea of where you need to be to legally shoot a deer.

The map also shows Restricted Areas: Island and areas marked in RED are no hunting zones. Please stay out of those zones. However, if you shoot a deer and it goes into one of those zones or the Reservoir itself, please contact a *Wachusett Watershed Ranger (M-F business hours)* or *MEMA State Control (24hr dispatch)*. The contact information is in the Rules and Regulations portion of your permit.

If it goes on private property, please be courteous to the landowner and ask permission to pursue the deer.

The map can be accessed from the Wachusett Deer Hunt Webpage on your home computer and you will have the ability to print out your own customized maps. **This same map** is also available on your smart phone on your mobile web browser. Just go to the Wachusett Deer hunt webpage on your phone's browser and click on the Reservoir Zone

Map link.

Or there is a free App that you can download to your smartphone app store called **Explorer for ArcGIS**:

To do this, visit your Apple or Android app store and search for Explorer for ArcGIS.

Download the App. When you open the app you can choose if you want to continue without signing in or sign in. Signing in allows you to save maps and bookmarks. Once you are in the app, you can search maps for “Wachusett Deer”. You’ll see 2 maps come up. Choose the one that is labelled Reservoir Zone.



## Reservoir Zone Antlerless Permits



Purchasing your Online Antlerless Permit through



Antlerless Tags: Must buy 1, optional 2<sup>nd</sup>

To Purchase your **Reservoir Zone Antlerless Permit** online you will need go to:

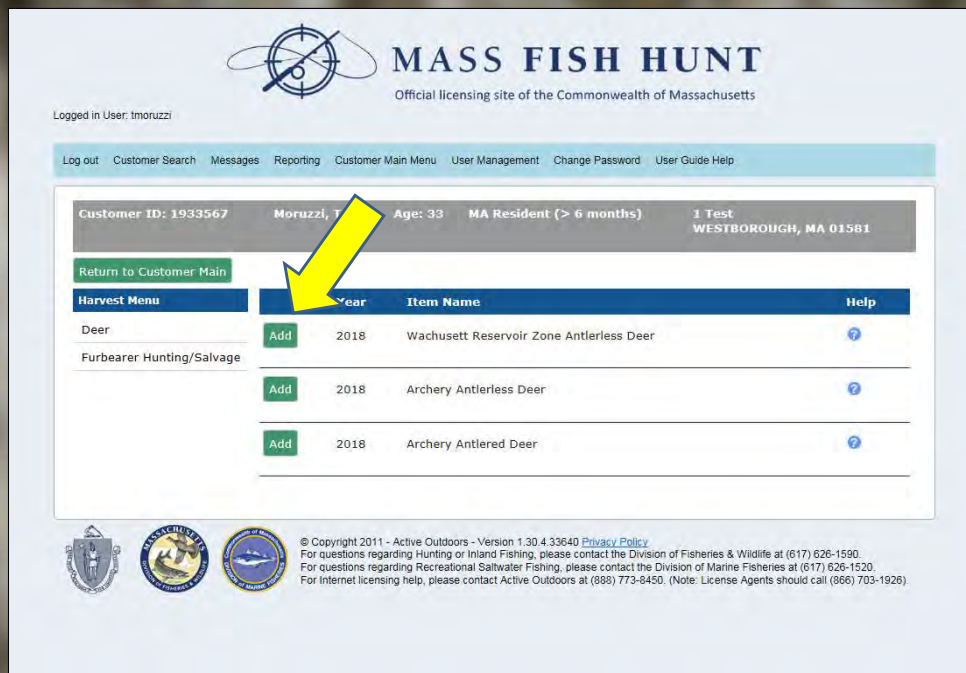
**[www.MA.WildlifeLicense.com](http://www.MA.WildlifeLicense.com)**

**On Sale:**  
**Monday, October 5<sup>th</sup> at 8 am.**



The antlerless permits for the Reservoir Zone Hunt are special bonus permits and are NOT Zone 9 permits. They do not count toward your statewide bag limit. All hunters are **required to purchase 1 antlerless permit** and have the option to purchase a second one. You cannot use Zone 9 permits to harvest a doe in the Reservoir Zone. Save those for your other hunting spots.

Special Wachusett Antlerless Permits will be available from Monday, October 5<sup>th</sup> at 8 am to Dec 31<sup>st</sup>.



Log into the [MassFishHunt system](#) (with your last name and customer ID).  
 Click the **License Sales** button on the right of the screen.  
 Choose **Special Hunt Permits** from the main menu on the left.  
 Choose **Add** next to “Wachusett Reservoir Zone Antlerless Deer Permit” (click twice to purchase two).

The Wachusett Reservoir Zone Antlerless Deer Permit will be placed in the shopping cart, and you may proceed to **Check Out** to complete the (\$5.00) purchase (or \$10 if you purchased two). **Hunters are reminded to print their Antlerless Deer Permits upon completion of the transaction.** You may print it at a later time, but may only have one copy in your possession while hunting. All Wachusett Reservoir Zone Antlerless Deer Permits expire at the close of hunting hours on December 31<sup>st</sup> 2020.



# Reservoir Zone Deer Check



Hunters are strongly encouraged to use MassFishHunt to report harvests online using a computer or smartphone.

Due to COVID-19, many check stations will not operate during the fall 2020 season.

- All MassWildlife offices, including fish hatcheries, will be closed to the public and many other check stations will be closed during the fall seasons.
- If you experience difficulties reporting your harvest online, call your nearest MassWildlife office for assistance. DFW Field Headquarters: (508) 389 6300



Be prepared to provide the following information:

- Name and Customer ID
- Date
- Town
- Wildlife Management Zone of harvest
- **Wachusett Special Hunt**
- Sex and weight of the animal
- Method of take (bow, shotgun, muzzleloader)

Normally, all deer taken during the first week of shotgun season must be brought to a physical check station so that MassWildlife staff can collect biological data. However, due to restrictions related to COVID-19, [online harvest reporting using MassFishHunt](#) will be allowed during the first week of the 2020 shotgun season and will be the preferred way for hunters to report their harvest.

They expect to return to normal physical checking during the first week of the 2021 shotgun deer season.

There is only one thing that is different about checking in a deer that was shot in the Wachusett Reservoir Zone. It is a special hunt that we are trying to document the harvest data from.

## Online Check: *MassFishHunt*

- Land Type: “Special Hunt”
- Comments: Wachusett


The screenshot shows the MassFishHunt website interface. At the top, the user is logged in as 'tmoruzzi'. Below the navigation bar, the user's profile information is displayed: Customer ID: 1933563, Name: Moruzzi, Test, Age: 44, MA Resident (> 6 months), and 1 Test in WESTBOROUGH, MA 01581. The main section is titled '2018 - Test archery deer TLM Sept 27'. A question is asked: '1 . What type of land did you harvest the deer on?'. A dropdown menu is open, showing options: 'Public Property (WMA, town or state forest)', 'Private Property', 'Unknown', and 'Special Hunt'. A yellow arrow points to the 'Special Hunt' option, which is highlighted with a red box. The footer contains logos for the Commonwealth of Massachusetts, the Department of Fish and Game, and the Division of Marine Fisheries, along with copyright information and contact details.

When you are filling out the information, make sure you choose “**Special Hunt**” under the Land Type question. This is a little different than what you are used to; it previously just said “Public or Private”.

Please put “Reservoir Zone” or “Wachusett” in the Comments section.

Additionally, if you are reporting an antlerless deer taken in the controlled hunt area:

- Choose “Wachusett Antlerless Deer” rather than either “Shotgun Season Antlerless Deer” or “Primitive Season Antlerless Deer”.



## 2020 Deer Harvest Reporting on DWSP Lands

Thank you for participating in The Division of Water Supply Protection's Deer Management Program. Harvest data is important to understand the deer populations on DCR lands. Thank you for providing this data.

Online Deer Harvest Reporting Instructions:  
Each deer harvested needs to be reported separately. You will have to answer a series of questions. You will need to examine your deer to answer some of the questions.

Reminder: Due to COVID-19, many check stations will not operate during the fall 2020 season. All MassWildlife offices, including fish hatcheries, will be closed to the public and many other check stations will be closed during the fall seasons.

Deer harvested during the 2020 hunting seasons may be reported online through MassFishHunt.

Customer ID \*

Last name \*

First name \*

Harvest Zone \*

Which Hunt zone did you harvested the deer in?

☐ Sudbury Reservoir Zone

☐ Wachusett RESERVOIR ZONE

☐ Wachusett Watershed Zone (5-year permit)

☐ Pelham Hunt Zone (Quabbin)

☐ Hardwick Hunt Zone (Quabbin)

☐ New Salem Zone (Quabbin)

Hunting equipment

What equipment did you harvest the deer with?

☐ Bow

☐ Shotgun

☐ Muzzleloader

☐ Crossbow (with special permit)

Harvest Date

Sex of Deer harvested \*

What is the sex of the deer you harvested?

☐ Male

☐ Female

☐ Unknown

Harvest Weight

What was the weight of the harvested deer? Please only report this if you had the deer officially weighed at a check station.

Age of the Deer \*

What is the approximate age of the deer? NOTE: Because deer are typically born in June, deer are aged by their half-year when they are harvested in fall/winter.

☐ Fawn (0.5 years old)

☐ Yearling (1.5 years old)

If you shoot a deer in the Reservoir Zone you will also be required to report the harvest to DCR. **Harvest information is important to the decisions we make regarding the hunt and the justification for the hunt. It allows us as wildlife managers to make decisions with regards to the logistics of the hunt.**

I will email the link to everyone before the hunt and it will be posted on the Wachusett Deer hunt Page. If you hunt any of our other properties, such as the Quabbin or Sudbury we ask you to do the same thing. A link to report the harvest will be on the area's deer hunting webpages. I will try to send out a reminder link at the start of shotgun season and again at the beginning of Primitive.



# WACHUSETT DEER HUNT SUMMARY

## Results: RESERVOIR ZONE

Of the deer harvested:

- Majority (80%) of deer harvested were antlerless

In order to reduce the number of deer in a population, it is vital to harvest does.

Every doe two years or older will produce offspring each year of their lives.

Average fawn production for healthy adult does is approximately 1.7 fawns per doe per year.



Population growth is primarily dependent on the number of does in the population.

So far, the hunts in the Reservoir Zone have been successful. From the beginning we wanted to control the number of female deer in the population. The females are the breeders.

Of the deer harvested, a majority have been antlerless deer.

In order to reduce or maintain the deer density we need to continue to harvest does. This is why the permits are specific to the Reservoir Zone and do not count against your statewide bag limit.

The literature says, that in the northeast, every doe that is 2 years or older will produce offspring each year of their lives. Another study found the does can start producing fawns in their first year if there is abundant food and a reduction in predators.

Additionally, each doe will produce almost 2 fawns per year. You can see that if a population is allowed to continue to expand, it can easily reach capacity within a short amount of time.

Therefore, population growth is primarily dependent on the number of breeding does in the population. We will continue to monitor the deer density at Wachusett and make adjustments to the number of bonus permits if necessary.

# WACHUSETT DEER HUNT SUMMARY

## Conclusions:

The expansion of deer hunting in the Wachusett Watershed has made a **significant impact** on the local deer population in its first year of implementation.

The continued success of this hunt will ensure that a diverse, multi age forest on Division lands.



*Since 2018 we have an estimated harvest of over 100 deer in the Reservoir Zone. If you include the deer harvested in the nearly 1000-acres opened recently to hunting in the Wachusett Watershed area east of I-190, the expansion of deer hunting in the Wachusett Watershed has made a significant impact on the local deer population in its first two years of implementation.*

The continued success of this hunt will ensure that a diverse, multi-age forest on Division lands will continue to provide a filter for the 3 million citizens of the Commonwealth that rely on this public water supply.

I want to thank you for participating in this effort.



*Questions?*



*Wachusett Watershed Ranger at 978 365 3800 or 508 792 7806 (M F business hours)  
MEMA State Control (24hr dispatch) 508 820 2000.*

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