

Mike Trump's Whitetail Deer Observation and Harvest Database

The purpose of this database is to allow you, the hunter, to collect information about the deer in the area where you hunt and enable you to analyze that data in greater detail. This data collection and analysis process will allow you to make informed decisions about overall herd management, form solid harvest strategies, optimize stand placement, and watch population trends over time. I would argue that it will also make you a better hunter, too.

Allow me to start with some basic comments about long-term data collection. First, the quality of information you get *out* of this database is directly proportional to the quality of the information that you put *into* this database. That is to say, you must be very diligent and consistent with your data collection. You must collect data every time you go afield and you must make sure that you remember to record it into the database upon returning to camp each day. Take a small notebook and a pen with you each time you go hunting and take notes in your stand as observations happen. This will greatly assist in your ability to keep the observation details fresh and accurate. The structure of this database also makes the assumption that you hunt hard and hunt often. Because, more hunting means more time in the field and more time in the field means more data collection. Finally, don't expect to see great things from this database until you have at least two full years of data recorded. The usefulness of this database and its calculations will continue to keep growing over time.

Key Concept Definition:

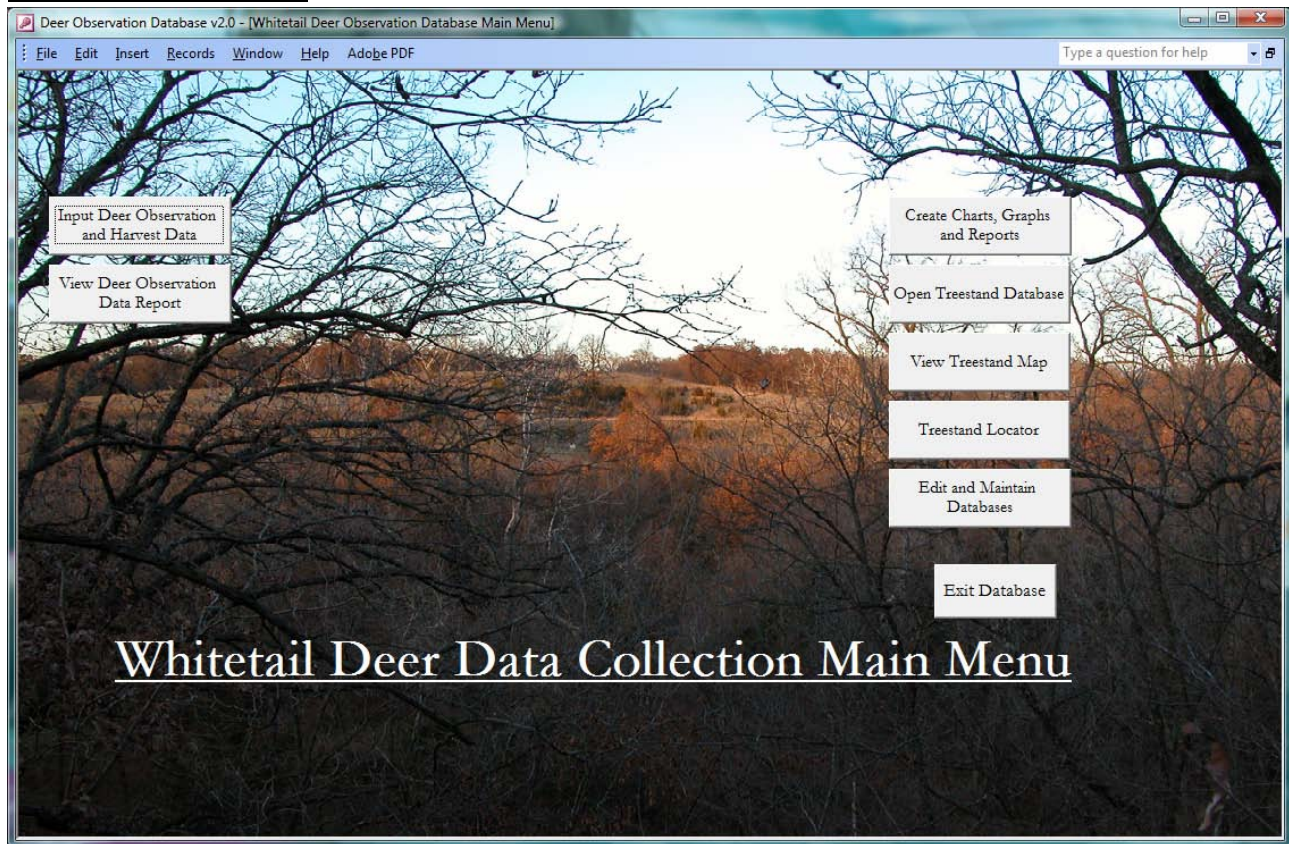
This database makes many of its core calculations based on the concept of "Hunter Hours." A hunter hour can be defined simply as the number of hours spent by each hunter while they are in the field each day. This is a key measurement because it allows you to build a relationship between the amount of time you spend hunting and the number of deer you see while hunting. This measurement can be used then to gauge deer densities, stand effectiveness, hunter success, etc. Therefore, because of the critical nature of this measurement to the overall accuracy and usefulness of the database, you need to make sure you understand exactly how to record this value in your observations. I will cover this in great detail in the **Observation Data Entry** section below.

Database Key Features:

- Consolidated single-screen **Observation Data Entry** utility with 23 unique data points, many with drop-down window selection.
- You can collect all of your **Harvest Data** on the same screen where your observation data is collected.
- You can also collect multiple **Harvest Data** entries for the same observation period.
- The **Treestand Database** allows you to catalog and organize all of your treestand locations.
- The **Treestand Locator** helps you determine which stands are best to hunt based on current wind conditions.
- The database also allows you to import your own **Treestand Map** directly into it so you can use it to plot your hunting strategies.
- The **Maintenance Utilities Window** allows you to add-to or edit many of the parameters which drive the database, its calculations, its drop-down menus, and reports.
- Over 25 **charts, graphs, reports, and spreadsheets** to help you manage your deer herd and plan your hunting strategies.

- Powerful **Population Dynamics Calculator** to help you estimate the effects your management plan is having on your deer herd.

Main Menu Screen



Getting Started

Before you begin using this database, you **MUST** perform the following setup tasks in the **Edit and Maintain Databases** screen: *(From the Main Menu, click on the Edit and Maintain Databases button.)*

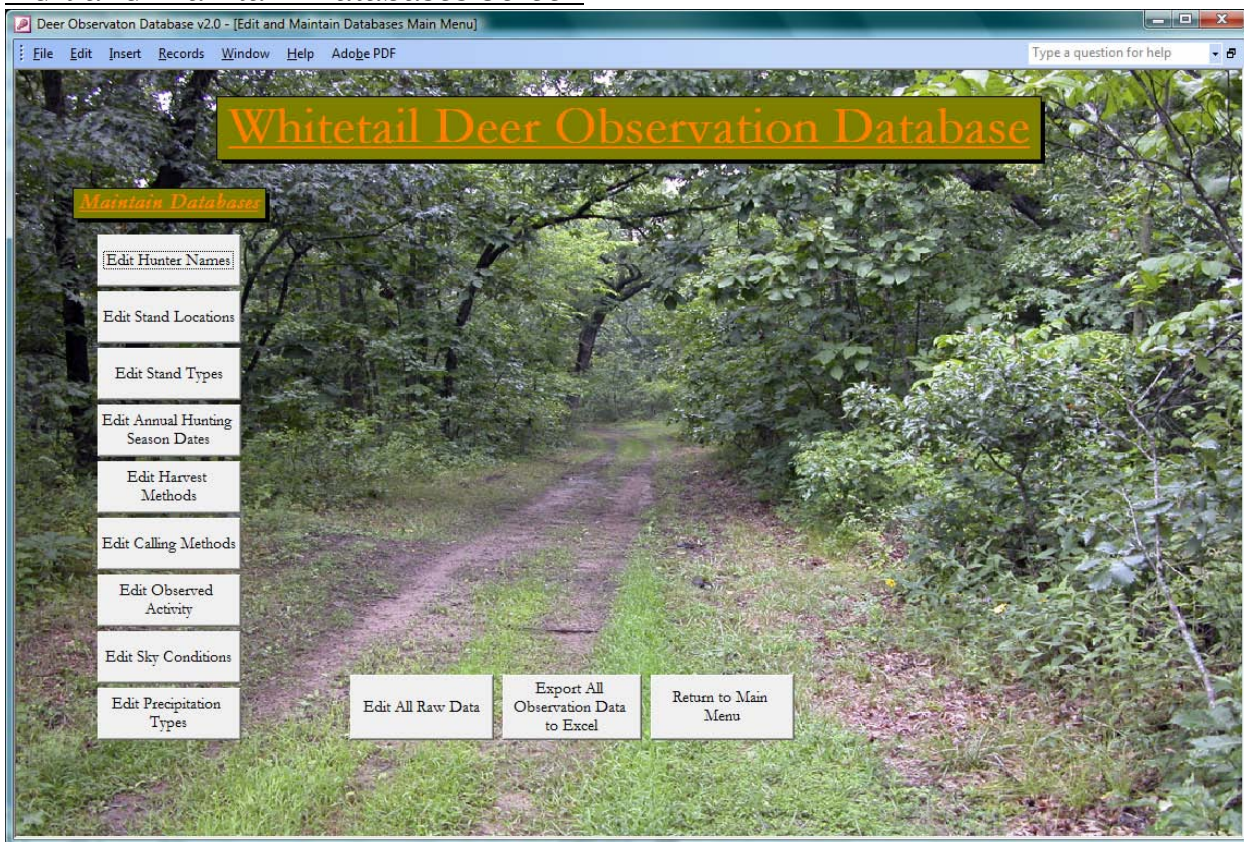
1. In the Maintenance screen click on the button titled **“Edit Hunter Names”**. Add your name and any other name of persons who will be making observation or harvest entries in your database.
2. In the Maintenance screen click on the button titled **“Edit Stand Types”**. Make sure all stand types fit your hunting situation. Make changes if necessary.
3. In the Maintenance screen click on the button titled **“Edit Stand Locations”**. Add all of your stand data into this database. Be sure to include primary and secondary wind directions as these values are very important to the operation of the Treestand Locator. It’s also helpful to name all of your stands. Names can be clever, boring, funny, numerical, or whatever. Just so you know exactly which stand you’re talking about. Some of my examples are: “Widow Maker”, “Four Tree”, “Fit Stand”, “Deep Ditch”, etc. You get the picture.
4. In the Maintenance screen, click on the button titled **“Edit Annual Hunting Season Dates”**. You will only be allowed to have two seasons per year in this version. The first season is your “Off-season” and the other is your “Hunting Season”. The hunting season date range should encompass the entire season for your state including bow, rifle, shotgun, muzzleloader, late season, etc. The database also makes the assumption that each year’s hunting season will cross

over into the first two weeks in January of the next year. If this is not the case in your state, be sure to adjust the dates accordingly.

5. In order to utilize the **Treestand Map** feature, you must create a jpeg image of your hunting land and save it to your C drive EXACTLY as follows: “C:\Treestand Map.jpg”.

Important Database Note: The settings above drive all of the drop-down selection windows throughout this database. The database remembers and associates each of your observation data entry records with all of the settings. These associations are permanent. Therefore, **DO NOT** change these settings once you start collecting data. You can easily add to them, just don't change the value of existing ones. For example, if you assign the first name slot to Jim, but then next year you decide to change that name slot to your other buddy Scott, you will lose all of Jim's data because it will all now be associated with Scott. This is true with ALL of the parameters in the Maintain Databases screen. Changing spelling is OK; just don't change the value's originally intended meaning. If you need to add a new value, its simple just Add a New Value.

Edit and Maintain Databases Screen



In addition to the top 4 buttons discussed above, the Maintain Databases screen has several more buttons to utilize. They are all explained below:

- **Edit Hunter Names** – this button takes you to a screen that allows you to add and update the names of the hunters which are adding data to the database.
- **Edit Stand Locations** – this button takes you to the **Treestand Location Database**.
- **Edit Stand Types** – this button takes you to a screen where you can add and update the types of deerstands you use.

- **Edit Annual Hunting Season Dates** – this button takes you to a screen where you can tailor individual hunting season beginning and ending dates for your particular state.
- **Edit Sky Conditions** – this button takes you to a screen that allows you to customize your naming conventions for varying degrees of cloud cover, fog, and sun conditions.
- **Edit Precipitation Types** – this utility allows you to customize your naming conventions for varying degrees of precipitation, snow, hail, etc.
- **Edit Harvest Methods** – this utility allows you to customize your methods of harvest specific to your hunting practices.
- **Edit Observed Activity** – this utility allows you to customize the types of activity you see deer doing when you are recording the observation.
- **Edit Calling Method** – this utility allows you to customize any types of calls you may use in the process of harvesting your deer.
- **Edit All Raw Data** – this powerful utility allows you to see and edit all data points within your entire database. Be very careful with this utility. Changes cannot be undone. Any data removed here will have to be completely re-entered.

Entering Your Observation and Harvest Data

As mentioned in the intro, this database makes many of its core calculations based on the concept of “Hunter Hours.” Again, a hunter hour can be defined simply as the total number of hours spent by each hunter while they are in the field. This is a key measurement because it allows you to build a relationship between the amount of time you spend hunting and the number of deer you see while hunting. This measurement can be used then to gauge deer densities, stand effectiveness, hunter success, etc. Therefore, because of the critical nature of this measurement to the overall accuracy and usefulness of the database, you need to make sure you understand exactly how to record this value in your observations.

Calculating your Hunter Hours and Entering Your Observations

Think of each trip to your stand or blind as a timeline that starts when you begin your hunt or walk to your stand and ends when you return back to camp. For the purpose of this illustration, let’s assume you begin your hunt at 6:00 am and return to camp for lunch at 12:00 noon. You will have a total of 6 hours to log for the morning’s hunt. To continue with the example, you see your first group of deer walk by at 9:00 am and there were 3 deer in the group (1 doe and 2 button bucks). You then see another pair of does walk by at 10:00 am, and finally, you see a lone 6-point buck at 11:45 am. When you get back to camp, you will have a total of 3 observation entries to make, and they should look like this:

1. Entry one will be made with a time of 9:00 am, hunter hours will equal 3 (6am to 9am = 3 hours) and you will record a total deer observed value of 3, an adult doe value of 1, and a juvenile buck value of 2.
2. Entry two will be made with a time of 10:00 am, hunter hours will equal 1 (9am to 10am = 1 hour) and you will record a total deer observed value of 2 and an adult doe value of 2.
3. Entry three will be made with a time of 11:45 am, hunter hours will equal 2 (10am – noon = 2 hours) and you will record a total deer observed value of 1 and an adult buck value of 1.

Therefore, if you were to summarize what is represented above in the three separate entries, you spent a total of 6 hunter hours in the woods and saw a total of 6 deer, which makes your deer per hunter

hour equal to 1.00 for that hunt. This value equates to seeing an average of one deer per hour spent hunting. Basically, as most hunts go, you usually see deer in groups followed by periods of no observations. These cycles of activity and inactivity form the basis of your observation data. As the example above illustrates, each entry into the database should be directly related to deer being observed at a particular time. If you batch all of your observations up for the entire day and make only one “grand total” style entry for each hunt, you will not be able to chart your deer movement over time or many other key measures which this database will calculate for you. Therefore, you it is essential you enter your observations individually based on each time you observed deer during your hunt.

Important Note: If you are unsure of the sex of observed deer, try not to guess. Just record the total number of deer observed, and leave the details at zero. This usually occurs with deer fawns.

Entering your Harvest Data

Harvest data entry fields can be found directly below the Comment field on the Deer Observation Entry screen. If no deer were harvested, DO NOT enter any values into the Harvest Data fields. This is critical, as the database assumes that only a true harvest event will populate these fields with values. Likewise, if you do harvest a deer, make sure to fill out all of the Observation data fields above as well as the Harvest data fields below, and congratulations on a successful hunt. If you are fortunate enough to harvest multiple deer at the same time, just adjust the Total Number Harvested figure to reflect the number of deer killed. An alternate method is to create a duplicate Observation record and Harvest record for each additional kill. However, this method is problematic due to the fact that it may erroneously multiply the hunter hours, total deer observed, or many other of the key values. The decision is yours.

Observation and Harvest Data Entry Screen

The screenshot shows the 'Deer Observation Database v2.0' application window. The title bar reads 'Deer Observation Database v2.0 - [Deer Observation and Harvest Data Entry]'. The menu bar includes 'File', 'Edit', 'Insert', 'Records', 'Window', and 'Help'. A search bar at the top right says 'Type a question for help'. The main content area is titled 'Deer Observation Data Entry' and features a background image of a deer in a field. The form contains the following fields:

- Date: /14/2007
- Hunter Name: [Empty]
- Time: [Empty]
- Hunter Hours: 0
- Observation Method: [Empty]
- Air Temp: 0
- Wind Direction: [Empty]
- Wind Speed: 0
- Precipitation: [Empty]
- Barometric Pressure: 0
- Sky Condition: [Empty]
- Moon Phase: [Empty]
- Rut Phase: [Empty]
- Total Deer: 0
- Adult Bucks: 0
- Juvenile Bucks: 0
- Buck Fawns: 0
- Adult Does: 0
- Doe Fawns: 0
- Observed Condition: [Empty]
- Stand Location: [Empty]
- Travel Direction: [Empty]
- General Activity: [Empty]
- Comments: [Empty text area]

On the right side, there are buttons for 'Add New Record', 'Save Record', 'Delete Record', 'Undo Record', and 'Exit To Main Menu'. Below the buttons are two hand icons. At the bottom of the form is a table titled 'Deer Harvest Data':

Number	HarvestMethod	Sex	Sex-Age Grouping	Antler Points	Gross Antler Score	Age	Weight	Lactation	Calling Method
▶									

At the bottom left, it says 'Record: 1 of 1'.

Observation Data Entry screen field definitions:

- **Date** – select the date of the observation being entered.
- **Hunter Name** – select the name of the hunter/observer.
- **Time** – enter the specific time the observation took place.
- **Hunter Hours** – enter the number of hours since your last observation for that hunt.
- **Observation Method** – select the observation method you were using.
- **Air Temp** – enter the ambient air temperature during the observation.
- **Wind Direction** – select the primary wind direction for that observation.
- **Wind Speed** – enter the average wind speed for that observation.
- **Precipitation** – select the precipitation present during that observation.
- **Barometric Pressure** – enter the barometric pressure during that observation day.
- **Sky Condition** – select the sky condition during that observation.
- **Moon Phase** – select the current moon phase for that observation day.
- **Rut Phase** – select the current rut phase for that observation day.
- **Total Deer** – enter the total deer observed.
- **Adult Bucks** – of the total deer observed, enter the number of bucks that were 2½ years old or older. This generally includes 6-points and up.
- **Juvenile Bucks** – of the total deer observed, enter the number of bucks that were between ½ - 1½ years old. This generally includes spikes, 4-points, and “basket racks.”
- **Buck Fawns** – of the total deer observed, enter the number of button bucks.
- **Adult Does** – of the total deer observed, enter the number of adult does that were 1½ years old and older.
- **Doe Fawns** – of the total deer observed, enter the number of doe fawns.
- **Observed Condition** – select the value that best matches the observed deer’s overall health and body condition.
- **Stand Location** – select the stand from which you made the observation.
- **Travel Direction** – select the average direction of travel for the deer you observed in relation to your stand location.
- **General Activity** – select the activity that best describes what the deer were doing when you observed them.
- **Comments** – this field will allow you to enter just about as many comments about the observation or harvest entry that you would like. Make sure to put in some comments. You’ll really appreciate them when you go back and look at your data a couple of years from now.

Harvest Data Entry screen field definitions:

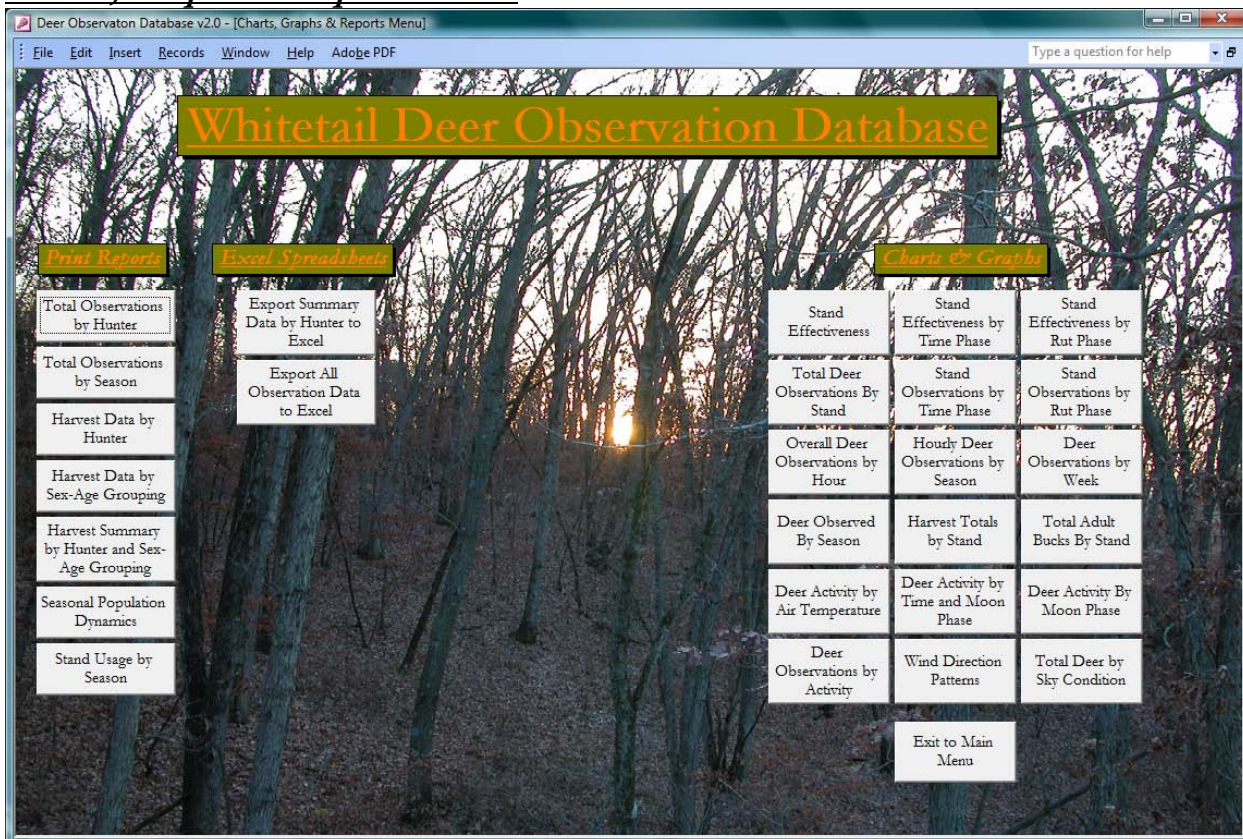
- **Number Harvested** – enter the total number of deer killed for this observation record. Remember, if you didn’t kill any deer, DO NOT enter any values here or in any of the following harvest fields.
- **Harvest Method** – select the appropriate harvest method used.
- **Sex** – select the appropriate sex of the deer harvested.
- **Antler Points** – where applicable, enter the total number of antler points on the deer harvested otherwise leave blank.
- **Approximate Age** – select the approximate age of the deer harvested. Lower jaw tooth aging is the best field method for this.
- **Lactation** – select yes or no to indicate if the harvested deer was lactating.

- **Dressed Weight** – enter the weight of the deer after field dressing.
- **Calling Method** – select the appropriate call used to harvest the deer.
- **Gross Antler Score** – where applicable, enter the gross antler score otherwise leave blank.

Creating Charts, Graphs and Reports

One of the most entertaining and informative aspects of this database are its charts and graphs. They're useful and fun because they are being created from your own observation data. This menu is broken into three main categories: Print Reports, Excel Spreadsheets, and Charts & Graphs. Each are useful in their own unique ways, and all will help you develop a strong understanding of your deer herd and your management strategies' effects on it. However, many of these charts, graphs and reports will remain blank until you begin loading observation information into the database. And, as mentioned above, the value of these tools will grow with your database as more and more data gets entered into it. Every effort has been made to ensure what they are presenting is accurate and true to the data you have painstakingly entered. You will find that some are geared toward telling you which stand locations are producing well and others will help you determine where best to set your next stand. However, the majority deal directly with observation trends over time and population dynamics of your deer herd.

Charts, Graphs & Reports Menu



Charts, Graphs & Reports Menu screen button definitions:

- **Total Observations by Hunter** – this button will generate a print report which details every observation data record in the database, grouped by season and hunter name.

- **Total Observations by Season** – this button will generate a print report which summarizes all observation data by hunting season.
- **Harvest Data by Hunter** – this button will generate a print report which details every observation and harvest data record in the database where a harvest was recorded.
- **Harvest Data by Sex-Age Grouping** – this button will generate a print report which summarizes all harvest data by unique deer sex/age groups.
- **Harvest Data by Hunter and Sex-Age Grouping** – this button will generate a print report which summarizes all harvest data for each hunter by unique deer sex/age groups.
- **Seasonal Population Dynamics** – this button will generate a print report by season which details specific population dynamic matrices utilized within the professional wildlife management community. In order to accurately use this utility, you first must obtain your hunting area's estimated deer-per-acre value from your local State or County Wildlife Biologist. The report also makes automatic adjustments in sex/age calculations based on your relative accuracy in data collection. Please keep in mind, while the values represented in this report will be reflective of your population, they should only be used as a guide for determining your harvest goals and future management strategies.
- **Stand Usage by Season** – this button will generate a print report which lists all the current stand locations that you have hunted this season, along with the total number of times you've hunted them. You should use this report to make sure you spread out your hunting pressure across multiple stands and don't overuse a particular area.
- **Export Summary Data by Hunter to Excel** – this button will generate a Microsoft Excel spreadsheet which summarizes each hunter's observations for a given hunting season.
- **Export All Observation Data to Excel** – this button will generate a Microsoft Excel spreadsheet containing all observation data from the database.
- **Stand Effectiveness** – this button will produce a graph that compares the total time you've spent in each stand to the total number of deer seen from the stand. So, basically, the more deer seen in the least amount of time equals the more effective the stand is in relation to the others.
- **Stand Effectiveness by Time Phase** - this button will produce a graph that compares the total time you've spent in each stand to the total number of deer seen from the stand during specific windows of time during the day.
- **Stand Effectiveness by Rut Phase** - this button will produce a graph that compares the total time you've spent in each stand to the total number of deer seen from the stand during specific rut phases across each season.
- **Total Deer Observations by Stand** – this button generates a chart which graphs all deer observations by stand, regardless of hunter hours.
- **Stand Observations by Time Phase** – this button generates a chart which graphs all deer observations by stand, regardless of hunter hours during specific windows of time during the day.
- **Stand Observations by Rut Phase** – this button generates a chart which graphs all deer observations by stand, regardless of hunter hours during specific rut phases across each season.
- **Overall Deer Observations by Hour** – this button generates a chart which graphs all deer observations over time of the day. There are also three other sub charts which can be accessed from this screen.
 - **Open Adult Bucks Chart** – this button generates a chart which graphs only adult buck observations over time of the day.

- **Open All Bucks Chart** – this button generates a chart which graphs all buck observations over time of the day. This includes adult, juvenile and fawn buck observations.
- **Open All Does Chart** – this button generates a chart which graphs all doe observations over time of the day. This includes adult and fawn does.
- **Hourly Deer Observations by Season** – this button generates a chart which charts each season’s deer observations and allows you to compare season to season.
- **Deer Observations by Week** – this button generates a graph which shows by season, the total deer observed each week. This should help you determine peak rut timing.
- **Deer Observed by Season** – this button generates a graph which shows total deer by sex and age category by season. The column called “Relative Hunter Hours” allows you to draw conclusions across years even when hunting pressure may not have been equal.
- **Harvest Totals by Stand** – this button generates a graph which shows the total deer harvested by stand location.
- **Total Adult Bucks by Stand** – this button generates a graph which shows the number of adult buck observations by stand.
- **Deer Activity by Air Temperature** – this button generates a graph which shows the relationship between deer movements and differing ambient air temperatures.
- **Deer Activity by Time and Moon Phase** – this button generates a graph which shows the relationship between deer movements, moon phase, and time of day.
- **Deer Activity by Moon Phase** – this button generates a graph which shows the relationship between deer movements and the different phases of the moon.
- **Deer Observations by Activity** – this button generates a graph which shows the overall observed deer activities by week.
- **Wind Direction Patterns** – this button creates a pie chart graph which shows the relative frequency of wind patterns in your hunting area. You can use this chart to help plan stand placement based on prevailing wind patterns.
- **Total Deer by Sky Condition** – this button creates a graph which details total deer observations by each sky condition.

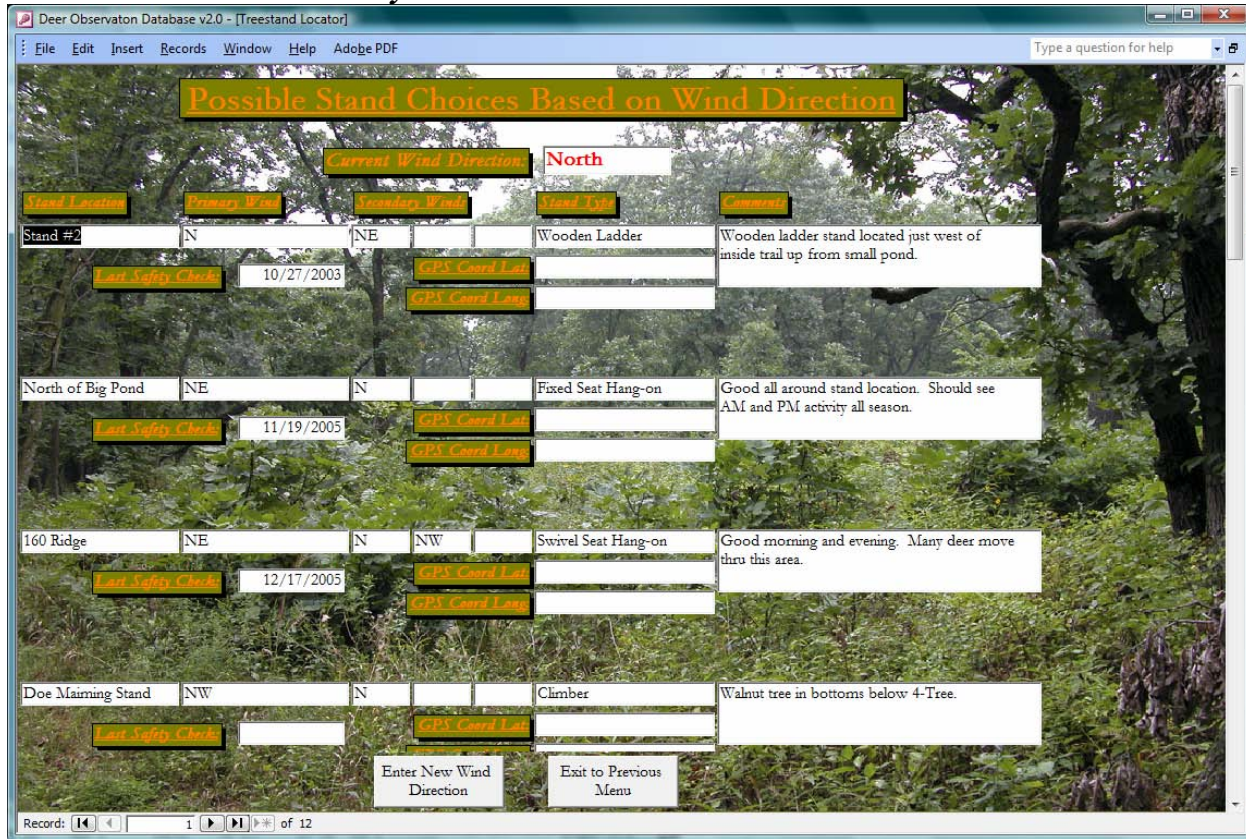
Treestand Utilities

In addition to this program’s many data collection and analysis functions, it also contains a robust Treestand Location and information database. This is particularly helpful if you hunt large tracts of land and have multiple stand locations to keep track of. As noted in the Getting Started section of this document, one of the first things you need to do is load all of your treestand, ground blind, tower blind, etc., locations into the Stand Location Database. It is also critical that you keep this database current as you move stands, reposition stands, find new stand locations, etc.

Another item of critical importance with regard to your treestand data is you need to determine at least two preferred wind directions for each stand. One will become the stand’s primary wind direction and the other(s) will become the stand’s secondary wind direction(s). I accomplish this by taking a compass with me each time I set a new stand and after it is set, I climb it, and using the compass, assess which wind directions are needed to hunt that particular stand. I write these down while I’m in the stand, then they later get loaded into the database along with the remainder of the stand’s pertinent information. With all of this information in place, when you use the Treestand Locator function, you

will see a screen that looks like the one below. Use this as a guide to determining which stands you should hunt based on current wind directions.

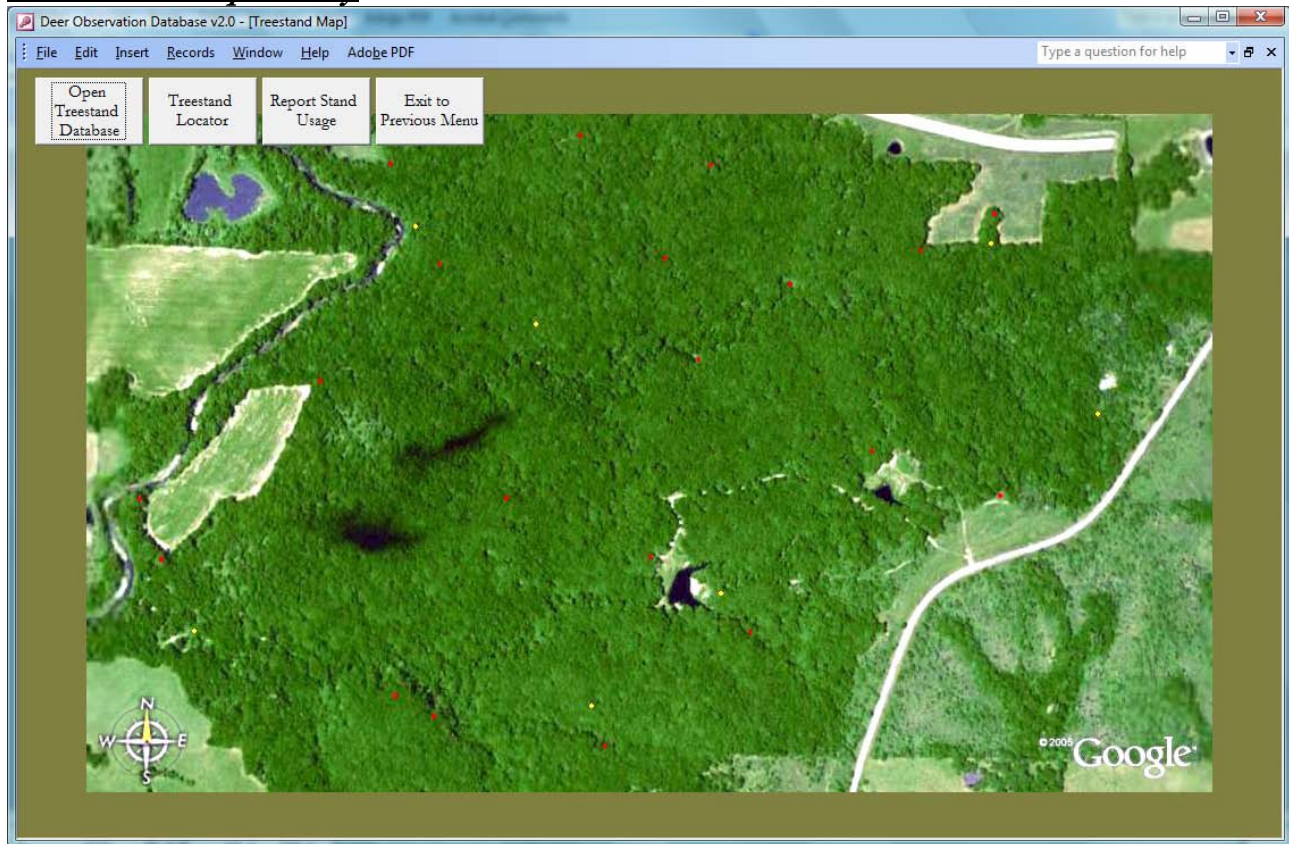
Treestand Locator Utility



Treestand Map

The final treestand utility contained within this database is the Treestand Map screen. You may customize this screen with your own personal hunting property map from the mapping source of your choosing. Be sure to mark all of your treestand locations on the map so they can be seen in the Treestand Map screen. The simplest way I've found to do this is to open your map in Microsoft Paint and use red dots to mark treestand locations. You can also insert text onto the map as well. Once you've finished editing the map, just make sure the file is created in the jpeg format and placed in a specific location in order for the Deer Observation Database to recognize (and find) it. Once you have your map, save it directly to your C: drive with the following file name: Treestand Map.jpg. If done correctly, you should see your map when you click on the Treestand Map button from the Main Menu screen.

Treestand Map Utility



Final Thoughts and Comments

I hope you enjoy this database as much as I've enjoyed building and using it. However, remember, you always get what you paid for, and since this program was FREE... Well, you draw your own conclusions. Just kidding. I would also like to thank Microsoft for designing the Microsoft Access Jet Engine that allowed me to create this program. And most of all, I would like to personally thank my Lord and Savior, Jesus Christ, for his eternal free gift for which I will never be able to repay.