



**Virginia
Master
Naturalist**
Southwestern Piedmont Chapter

THE VINE



WINTER, 2012
VOLUME 3 NUMBER 4

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**DON'T FORGET TO LOG YOUR
VOLUNTEER HOURS FOR 2012!**

[https://virginiamn.volunteersystem.org/
UniversalLogin.cfm](https://virginiamn.volunteersystem.org/UniversalLogin.cfm)

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Vice President, Open
Secretary, Mavis Rice
Treasurer, Denny Casey
Past President, Kathy Fell

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Advisor/Development, Denny Casey
Host, tba
Membership, Christy Deatherage
Newsletter/Web Page, Ashby Pritchett
Outreach/Publicity/Historian, Lynn Pritchett
Program, Open
Training, tba
Volunteer Service, tba

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PRESIDENT'S MESSAGE

Happy New Year! We are starting out with several training, volunteer service project and meeting opportunities for our local chapter. The Museum will be promoting the new dinosaur exhibit during Dino Days on January 11 and 12. Master Naturalists are invited to help with the event. On January 26, the Dan River Basin Association will be holding a Rivers and Bugs summit at the Museum. These events offer a great opportunity to get a head start on your 2013 Master Naturalist certification by earning some volunteer and/or advanced training hours.

The chapter event for January will be our annual awards banquet to be held on January 17. We have several new members that we will introduce as well as present the Naturalists who re-certified in 2013. Ballots will be cast for new officers and you will have the opportunity to learn about the various committees that are available. Serving on a committee is another great opportunity for earning up to 15 of the 40 volunteer hours required to certify as a Master Naturalists. Make sure to RSVP to Christy by January 10 if you plan to attend the banquet.

Thank you so much for allowing me to serve as the chapter president this year. I am so glad to be a part of the Naturalist organization. As stated on the Master Naturalist website, the mission of the Naturalist program is to: "develop a corps of well-informed volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities for the Commonwealth of Virginia."

I look forward to serving with you in 2013 to accomplish our goal.

Dottie

STAR GAZING PARTY

October 25, 2012

Report by Lynn Pritchett

Our chapter's first ever Autumn Star Gazing Party was quite a success. All past and current chapter members, presenters, families and friends were invited to come and "enjoy the twinkling company of the autumn constellations and the heart of our own galactic home--the Milky Way". An enthusiastic group of 27 people gathered for this almost cloudless evening under the stars. A special thanks goes to Tena Bullins for help with these reservations, and for Dr. Dennis Casey for hosting the event.

From the Great Hall area of the Virginia Museum of Natural History, we were escorted up to the flat surface of the museum's rooftop. There we were greeted by chapter advisor Denny Casey, who invited us to look into a couple of very powerful telescopes he had set up near the table full of displays and items which had been gathered for the evening's activities.

Denny introduced us to a couple of the many free resources from SkyMaps.com. The two he shared with us that night were a printed paper Sky Map of the night sky and a free phone application (app) called Sky Map.

The Sky Map printout showed the entire northern hemisphere sky from horizon-to-horizon as it appeared that October night. Sky Map publishes a new map each month, with notations and a listing of the brighter and more interesting celestial objects that will be visible in the evening sky throughout the month.

The Sky Map phone app turns your smartphone into a "window" of the night sky. If you point your device at the sky, your phone screen image overlays exactly what you are looking at with labels. It can be set to displays stars, planets, moon phases, constellations and meteor showers! If you find this interesting, you might enjoy watching the Google Sky Map Video for a description of their Sky Map app using the link below.

For iPhones or iPads, download Mobius Entertainment's Sky Map. You need to have Apple iTunes...both are free. Android phone users can download the free Google Sky Map app from the Android Market.

Link to Sky Map website: <http://www.skymaps.com>

Link to Northern Hemisphere October 2012 sky map: <http://www.skymaps.com/skymaps/tesmn1210.pdf>

Link to iPhone app: <https://itunes.apple.com/us/app/sky-map/id536492883?mt=8>

Link to video about for Google Sky Map for Android: <http://www.google.com/mobile/skymap>

Using Sky Map, Denny encouraged us to explore the upward view, and find and name what we could. Easily spotted beauties included the star cluster called the Seven Sisters of Pleiades; the vast expanse of the Milky Way band; the planet Mars; the constellations of Cassiopeia, Pegasus, and the Big Dipper. Denny reminded us that the Big Dipper can be used as a point of reference to find the North Star and the Little Dipper. Some of us were able to find the constellation of Draco the dragon wrapped around the Little Dipper.

Afterwards, Denny led some interactive demonstrations and group activities. These helped us better understand light pollution, the phases of the moon, and the spiraling of the galaxies. Under the glow of the waxing gibbous Hunter's Moon, we thoughtfully considered the relationships between cultures and the cosmos and created our own "constellations" with tiny hand-held lights. This was a fun way to earn one hour of advanced training credit. Thanks, Denny!

*Note: If you attended this event, and would like to credit and log your time on the Virginia Master Naturalist Volunteer Management System, go the web site <https://viriniamn.volunteersystem.org/UniversalLogin.cfm> . Select "Advanced Training" from the required pull down menu. Select October 25, 2012 from the calendar, add one hour to the continuing education hours, and type in "Autumn Star Gazing Party" for the Event Description.

BEEKEEPING BASICS

November 15, 2012

Jay Hudson, a third-generation beekeeper from Fieldale, Virginia, discussed the life cycle of bees, and some of the procedures in starting and maintaining bee hives.

SWARM. In Spring, an increase in the bee population begins a buildup that leads to congestion in the hive. The colony swarms when the queen grows wings and flies off with another portion of the hive to start another colony. A swarm is how a colony reproduces itself.

REBUILDING THE HIVE. Bees left behind thereafter raise a new queen by feeding her royal jelly. They choose several small larvae and feed them with copious amounts of royal jelly in specially constructed queen cells. This type of feeding triggers the development of queen morphology, including the fully developed ovaries needed to lay eggs.

BEE FOOD. Royal jelly is a honey bee secretion that is used in the nutrition of larvae and adult queens. It is secreted from the glands in the hypopharynx of worker bees, and fed to female larvae in the colony. Bees are adapted for feeding on nectar and pollen, the former primarily as an energy source and the latter primarily for protein and other nutrients. Most pollen is used as food for larvae.

HONEY. Honey is a sweet food made by bees using nectar from flowers. The variety produced by honey bees depends on the flower from which nectar is collected. Polyfloral honey, also known as wildflower honey, is derived from the nectar of many types of flowers. The taste may vary from year to year, and the aroma and the flavor can be more or less intense, depending on which bloomings are prevalent. Monofloral honey is made primarily from the nectar of one type of flower. Different monofloral honeys have a distinctive flavor and color because of differences between their principal nectar sources. To produce monofloral honey, beekeepers keep beehives in an area where the bees have access to only one type of flower. In practice, because of the difficulties in containing bees, a small proportion of any honey will be from additional nectar from other flower types. Typical examples of North American monofloral honeys are clover, orange blossom, blueberry, sage, tupelo, buckwheat, fireweed, and sourwood.

DIFFICULTY MAINTAINING HIVES. Hudson explained that few wild colonies remain, but diseases caused by pests and parasites, bacterial fungal or viral diseases may also affect bees kept in apiaries. He describes some of the pests and diseases that can appear locally:

Varroa destructor and *Varroa jacobsoni* are parasitic mites that feed on the bodily fluids of adult, pupal and larval bees. Varroa mites can be seen with the naked eye as a small red or brown spot on the bee's thorax. Varroa mites are carriers for a virus that is particularly damaging to the bees. Bees infected with this virus during their development will often have visibly deformed wings. Varroa mites have led to the virtual elimination of feral bee colonies

Nosema apis is a fungus that invades the intestinal tracts of adult bees and causes nosema disease. Nosema is normally only a problem when the bees can not leave the hive to eliminate waste (for example, during an extended cold spell in winter or when the hives are enclosed in a wintering barn). When the bees are unable to void (cleansing flights), they can develop dysentery. Nosema is treated by increasing the ventilation through the hive. Some beekeepers will treat a hive with antibiotics. Nosema can also be prevented or minimized by removing much of the honey from the beehive then feeding the bees on sugar water in the late fall. Sugar water made from refined sugar has lower ash content than flower nectar, reducing the risk of dysentery.

BEEKEEPING BASICS (continued)

The *Small Hive Beetle* is a small, dark-colored beetle that lives in beehives. The small hive beetle can be a destructive pest of honey bee colonies, causing damage to comb, stored honey and pollen. If a beetle infestation is sufficiently heavy, they may cause bees to abandon their hive. Its absence can also be a marker in the diagnosis of Colony Collapse Disorder for honey-bees. The beetles can also be a pest of stored combs, and honey (in the comb) awaiting extraction. Beetle larvae may tunnel through combs of honey, feeding and defecating, causing discoloration and fermentation of the honey.

The *Wax Moth* will not attack the bees directly, but feed on the wax used by the bees to build their honeycomb. Their full development to adults requires access to used brood comb or brood cell cleanings—these contain protein essential for the larvae's development, in the form of brood cocoons. The destruction of the comb will spill or contaminate stored honey and may kill bee larvae. When honey supers are stored for the winter in a mild climate, or in heated storage, the wax moth larvae can destroy portions of the comb, even though they will not fully develop. Damaged comb may be scraped out and will be replaced by the bees. Wax moth larvae and eggs are killed by freezing, so storage in unheated sheds or barns in higher latitudes is the only control necessary.

The outlook for keeping bees in apiaries “is not that good”, explained Hudson. Small beekeepers are getting out of the business, because it is not economically rewarding, and can be so time-consuming to keep hives healthy.

Hudson is still optimistic about his hive, and plans to open more apiaries. People attending this lecture tasted samples of honey: wildflower, sourwood and buckwheat, served on biscuits made by Hudson's wife, Ann.

Hudson is a member of the Southwest Piedmont Beekeepers' Association, which meets the first Tuesday every month at the Henry County Administration Building. Refer to link: <http://www.viriniabeekeepers.org/content/southwest-piedmont-beekeepers-association> .

Good news for those who'd like to start beekeeping...
The Virginia General Assembly created a Beehive Grant Fund to promote establishing new beehives in Virginia. Beginning Jan. 1, 2013 any individual who either purchases materials or supplies to construct a new hive may apply for a grant from the Fund up to \$200 per hive, not to exceed \$2,400 per individual per year!
<http://www.vdacs.virginia.gov/plant&pest/pdf/beegrant.pdf>

Right, Jay Hudson.

Photo by Ashby Pritchett.



BLUEBIRD BOX BUILDING

December 15, 2012

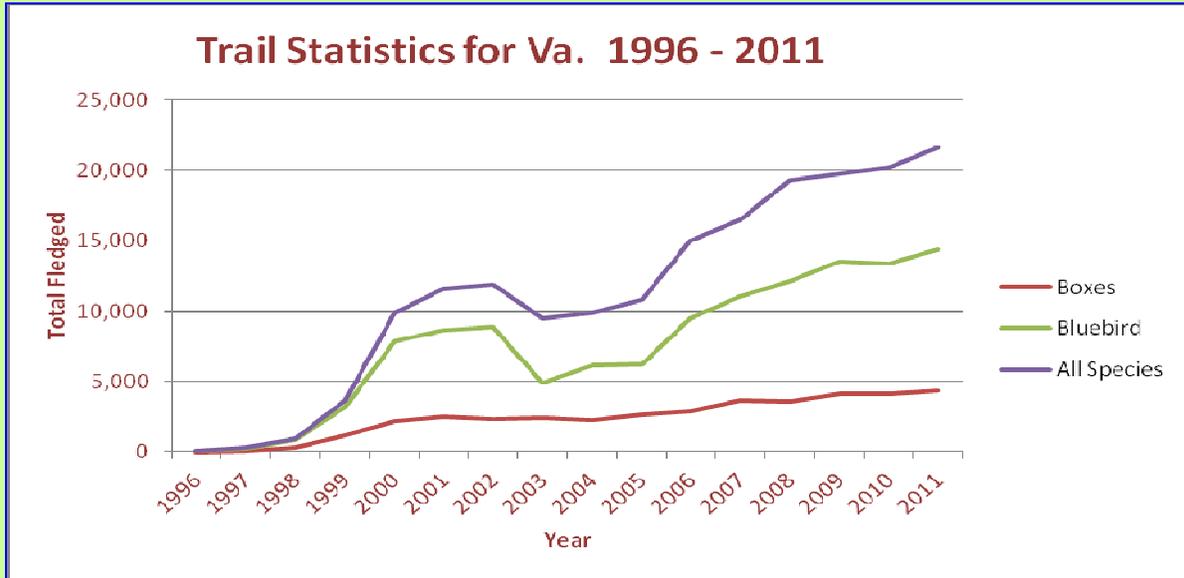
Submitted by Dottie Haley



Source: <http://www.virginiabluebirds.org/photopage.html>

Members of the VMN met at the museum on December 15 to assemble Bluebird boxes and learn about box monitoring. A brief presentation was given on Bluebirds and the history of box monitoring. Due to the steady decline in the Bluebird population, Dr. Lawrence Zeleny founded the American Bluebird Society in 1978 and the Virginia Bluebird Society soon followed in 1998. Since Bluebirds are cavity nesters, their habitat slowly began to disappear. Cities began to spread into rural areas and homeowners became more reluctant to leave dead trees standing. The introduction of the Bluebird box system provided places for Bluebirds to nest and monitors to provide stewardship and help with the process when needed.

BLUEBIRD BOX BUILDING (continued)



Data from the Virginia Bluebird Society Website

As you can see from the above trail data, the total number of Bluebirds, as well as other small bird species benefiting from the trail systems has steadily increased each year. In 2011, total number of birds fledged from nest boxes exceeded 20,000. Bluebird box monitoring is an approved volunteer service project for our chapter. If you are interested in becoming a Bluebird Box monitor to earn volunteer service hours, contact Dottie Haley.

Photo by Dottie Haley



DESCRIPTIONS OF VOLUNTEER PROJECTS

Virginia Master Naturalist certification requires 40 hours of volunteer service annually. All service projects listed below have been approved by the Chapter. You can also submit your own Project Proposal to the Chapter Board for approval. There are opportunities galore! Get involved! Visit the Master Naturalist Volunteer website (<https://virginiamn.volunteersystem.org/UniversalLogin.cfm?logout=1>), click on “New User” and sign in to access the portal.

[Advanced Training](#)

Description: Attend approved events for advanced training.

[Service-Admin](#)

Description: Support the chapter with administrative assistance. This includes attending board meetings and organizing events.

[Service-CitSci: Bio-Blitz](#)

Description: Survey an area for specific species diversification, document and report findings and monitor over time.

[Service-CitSci: Blue Bird Monitoring](#)

Description: Build new blue bird boxes, establish new Blue Bird Trails and Maintain and collect data from blue bird nest boxes.

[Service-CitSci: Frank Wilson Park Eco-Survey](#)

Description: Survey the flora and fauna in Frank Wilson Park, document and report findings and monitor over time.

[Service-CitSci: Project Feeder Watch and Bird Counts](#)

Description: Project FeederWatch is a winter-long survey of birds that visit feeders at backyards, nature centers, community areas, and other locales in North America. FeederWatchers periodically count the birds they see at their feeders from November through early April and send their counts to Project FeederWatch. FeederWatch data help scientists track broadscale movements of winter bird populations and long-term trends in bird distribution and abundance.

This project also covers participation in any recognized Bird Count event that collects data to be used in the study of the long-term health and status of bird populations found in Virginia. This includes, but is not limited to the following: Audubon Christmas Bird Count, The Great Backyard Bird Count, Cornell Christmas Bird Count, etc.

DESCRIPTIONS OF VOLUNTEER PROJECTS (continued)

[Service-CitSci: Research and Collections Volunteer](#)

Description: Assist the curators at the Museum of Natural History with their research, management and documentation of their collections.

[Service-CitSci: Water Quality Monitoring](#)

Description: Collect samples from area streams, analyze, document and report the data findings to track the water quality over time.

[Service-CitSci: Weather monitoring and reporting](#)

Description: Regularly collect and submit weather related data such as precipitation for an approved organization such as the National Weather Service.

[Service-CitSci: Wildlife mapping](#)

Description: A citizen science program developed by the VA Department of Game and Inland Fisheries (VDGIF), one of our state sponsors.

The project is an opportunity for citizens to share their wildlife observations with resource managers in Virginia. It is an important tool to help state and local resource managers keep track of common species. It complements scientific surveys, monitoring, and research efforts in the Commonwealth by providing distributional data on a variety of species. Volunteers that are not certified may earn credit but must accompany a certified Wildlife Mapper in the field and must submit all observations to the chapter's Wildlife Mapping Project Chairs.

[Service-Ed: Illustrations for Publications](#)

Description: Develop illustrations for educational material that will be published by any of our sponsoring partners.

[Service-Ed: Lead Interpretive Hike](#)

Description: Naturalists will plan and lead a hike along an established trail, identifying flora and fauna along the trail. Naturalists may also lead age-appropriate activities, such as a "no pick" scavenger hunt to help engage the younger members attending the hike.

[Service-Ed: Outdoor education Programs \(We R Indie\)](#)

Description: Provide education to students attending the We R Indie Music camp.

[Service-Ed: Pocket Guide](#)

Description: Develop a pocket guide of common species in Southwestern Piedmont VA.

DESCRIPTIONS OF VOLUNTEER PROJECTS (continued)

[Service-Ed: Publicity and Communications Networking](#)

Description: Assist with outreach tables at events, advertising, press releases, newsletter contributions, etc.

[Service-Ed: Trout in the Classroom](#)

Description: Support the Trout in the Classroom program throughout the local school systems.

[Service-Ed: Virginia Master Naturalist Basic Training Program](#)

Description: Support the development, scheduling and delivery of the Virginia Master Naturalist Basic Training Course.

[Service-Ed: VMNH Education Department Volunteer](#)

Description: Become an interpreter at Virginia Museum of Natural History, assist with tours, visiting groups, and education programs, and provide help for special events (Dino Days, Outdoor Fun Festival, Reptile Days, Bug Daze, etc).

[Service-Ed:Trees in the Classroom](#)

Description: Support the Trees in the Classroom program for the community schools.

[Service-Stewardship: Acorn Collection](#)

Description: Annual collection of acorns.

[Service-Stewardship: Chestnut Planting and Monitoring](#)

Description: A once plentiful tree, the American Chestnut tree was nearly extirpated from the eastern United States by the Chestnut blight, a [pathogenic](#) fungus ***Cryphonectria parasitica***. Planting chestnut seeds, watering, protecting from wildlife damage, and monitoring through the annual collection and reporting of tree data to ACCF will further the Foundation's mission to re-establish this tree in our American Forest.

[Service-Stewardship: City Park Beautification](#)

Description: Plant native Trees, shrubs or flowers near park entrances and along trails to add beauty to the park.

[Service-Stewardship: FairyStone Park](#)

Description: The purpose of this project is to pick up litter and recyclables along established trails, picnic shelters, and other parts of the park that are public access that need to be kept clean for others to use and enjoy as well as to prevent flora or fauna from being damaged from litter and recyclables.

DESCRIPTIONS OF VOLUNTEER PROJECTS (continued)

[Service-Stewardship: Frank Wilson Park Clean-Up](#)

Description: Clean up litter in Frank Wilson Park.

[Service-Stewardship: Gravely Nature Preserve](#)

Description: Clean up litter in Gravely Nature Preserve, etc.

[Service-Stewardship: Invasive Species Removal](#)

Description: Remove invasive species of plants from local parks and public areas.

[Service-Stewardship: Riparian Buffer Planting](#)

Description: Plant trees and shrubs to prevent erosion along streams.

[Service-Stewardship: Riparian Corridor Cleanup and Monitoring](#)

Description: Local creek and rivers have experienced reduced biodiversity due to a variety of environmental issues. Cleanup of litter and toxic materials dumped in and along the creek corridor will improve the health of the ecosystem.

Examples: Blackberry Creek, Beaver Creek, Daniel's Creek, Smith River.

[Service-Stewardship: Trail development and/or maintenance](#)

Description: Establish new trails. Upgrade or maintain existing trails.

[Service-Stewardship: Wildlife Habitat Corridor Design](#)

Description: The design and installation of a wildlife habitat corridor at Ingles Castle will connect two wildlife corridors to the New River in Radford, VA, as it screens a electric power substation (unsightly). The following was submitted with the design to AC Wilson, Ingles Castle property owner, and the City of Radford, VA.

1. Screen substation around perimeter to improve views and aesthetics along Ingles Drive and from within the adjacent National Historic register site, La Rivière, also known as Ingles Castle.
2. The design theme was developed to utilize plant materials that not only screen but provide wildlife habitat, habitat corridor connections, and food resources. **19** native trees and shrubs were specified in addition to the existing native species represented on the adjacent properties.
3. The design theme utilizes predominately native species exhibiting interesting form, texture, flower color, and fruit production.
4. Plant material maximum mature size, hardiness, and maintenance requirements were carefully considered in plant selection and placement in the design.
5. Plant materials were selected to avoid conflict with overhead utility lines and a plant free zone was established around the fence perimeter to facilitate fence and substation maintenance.
6. The design is intended to replicate a temperate forest-like situation where multiple species are represented versus a monoculture.
7. The plant materials specified will provide local residents with a visual palette of suitable plant species for use in landscapes in and around Radford, Virginia.

VOLUNTEER HOURS

Volunteer hours reported as of December 31, 2012:

Categories -

- Administration
- Advanced Training
- Citizen Science
- Education
- Stewardship

Reported Total– 790 hours or 39.0% of our Chapter Goal.

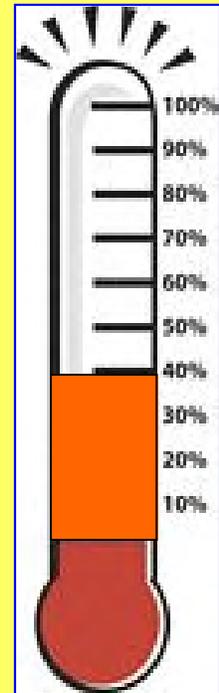
Thank you, volunteers!

Report all volunteer hours to:

Christy Deatherage, turkeyball@comcast.net, (276)627-6276, or submit hours to the VMN Volunteer Management System at <https://virginiamn.volunteersystem.org/UniversalLogin.cfm>

2012 CHAPTER GOAL:

2000 VOLUNTEER HOURS



NOTICES

- **January 17, 2013— Certification & Awards Banquet @ VMNH 6:30PM**
- **January 26, 2013-Rivers & Bugs Summit @ VMNH 8:30AM-1:30PM**
- **February 2013– TBA @VMNH 6:00PM**
- **March 2013– TBA @VMNH 6:00PM**



Our Chapter Board.

2012 SWP Chapter Board Members. From left to right, Lynn Pritchett, Denny Casey, Kathy Fell, Tamara Poles, Christy Deatherage, Dottie Haley and Mavis Rice.
Photo by Ashby Pritchett

Southwestern Chapter Calendar of Events:

<http://www.virginiamasternaturalist.org/southwesternpedmont.html#news> ;
Click on “Calendar of Events”.