



Safety and Risk Management for Virginia Master Naturalist Volunteers

Authored by Michelle Prysby, Virginia Master Naturalist Program Director, Department of Forest Resources and Environmental Conservation, Virginia Tech, with assistance from Historic Rivers VMN volunteers.

Introduction

Every day, Virginia Master Naturalists are engaged all over our state in a wide variety of activities. They could be out in the woods teaching youth about the wonders of nature, hiking on a remote trail to retrieve a wildlife camera, paddling a kayak to gather water samples, planting a roadside pollinator habitat, educating a homeowner about invasive species, or many other activities involving education, citizen science, or stewardship.

Everything that Virginia Master Naturalists do involves some sort of risk. It could be risk to their own health and safety, risk to the health and safety of participants in the programs they lead, risk to property (like those new pollinator plants they are planting), risk to the natural resources, or risk to the reputation of the volunteers, chapters, program, state agency sponsors, and local partners with whom they are volunteering.

Risk management means all the strategies we use to try to reduce the likelihood that some action we take will cause harm. Risk management is the responsibility of every Virginia Master Naturalist volunteer.

In this publication, we describe the common categories of risk VMN volunteers may encounter as part of their learning and service in the program. We give examples of specific risks in each category, and we describe recommended strategies for VMN volunteers to follow. While this publication is not a comprehensive list of all possible risks, it should make volunteers aware of typical risks and guide their identification of and planning for the particular risks of their activities. At the end are several worksheets to help volunteers plan for and document risk management plans.

General Personal Protection



[Safety](#) by Andy Miranda from the [Noun Project](#).

Your first responsibility is to keep yourself safe!

- Make sure that the activity is an approved one in your chapter before participating. Identify under which project the activity is approved.
- Review the hazards and risks of the activity and prepare for them. Document your process (see Appendices I and II.)
- Work in pairs or a group, and avoid going into the field alone.
- Be prepared for the weather and environmental conditions that you will encounter. Pack and dress accordingly.
- Carry a cell phone, and stay aware of the closest place you can go to get help or make a call.
- Carry a first aid kit and any medications or equipment that you require.
- Share your emergency contact information with others.
- Know your own abilities and what the activity requires. Make sure it is the right fit for you.
- Take periodic breaks and do not exhaust yourself.
- Drink before you feel thirsty, eat before you feel hungry, and rest before you feel tired.

- Make sure you know how to use any tools or equipment for the activity.
- Ask for assistance if you need it.

General Duty of Care



[Safety](#) by Pavitra from the [Noun Project](#).

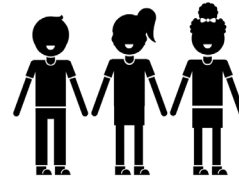
As a VMN volunteer, you have a responsibility to provide a reasonable standard of care while leading activities that could foreseeably harm people, whether they are other VMN volunteers or members of the public.

Some strategies you will want to use when leading activities for other people include:

- If there are multiple leaders or organizations involved, make sure it is clear who is responsible for what aspects of the program. Who is responsible for everyone's safety? Do not assume that another entity is responsible, particularly if no one from that entity is going to be present at the actual event.
- Use registration forms or check-in sheets to document who is in attendance. In some cases, you might want to collect emergency contact numbers for each participant.
- Communicate expectations to the participants ahead of time, including what to wear, what to bring, the difficulty level of the activity, and what skills or abilities are needed.
- Scout the trail or site ahead of time, noting potential hazards.
- Always provide clear instructions and safety reminders at the beginning of any program or activity.
- Waiver forms are an optional way to communicate expectations. They do not remove your duty of care responsibilities, however.
- Know what you'll do in an emergency.
- Carry a cell phone. If you are in an area without cell reception, know the nearest place you can go to make a call.

- Carry or have reasonable access to a first aid kit.
- Carry the emergency procedures card and refer to it if an emergency arises. Printable copies of the card are at https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/490/490-101/490-101-PDF.pdf
- Bring a copy of the incident report form, available at <http://www.virginiamasternaturalist.org/risk-management.html>.

Youth Interactions



[Friends](#) by Marie Van den Broeck from the [Noun Project](#).

Leading activities for youth, defined as individuals under 18 years old, requires some special procedures.

Many programs you may lead for youth will be organized and under the umbrella of another organization, such as perhaps your local Parks and Recreation department, a State Park, or a school. If this is the case, you will need to follow the guidelines of that organization in addition to what we are discussing here. Partnering with other organizations in this way can be very helpful, because their representatives may have the primary duty of care and may be able to assist with planning an age-appropriate program, behavior management, and other aspects of the activity outside of the environmental education content.

If you or your chapter is organizing a program or activity for youth yourself, not under the umbrella of another organization, then it is important to know that you need to work with Virginia Cooperative Extension's 4-H to put on the program if it involves more than 6 contact hours with the same youths. Your local Virginia Cooperative Extension 4-H agent will be able to provide appropriate screening of any volunteers who will be supervising youth, assist you with recruitment and registration, provide

training in working with youth, give you access to 4-H curriculum materials, and help you with planning risk management strategies. They are experts in youth programming and are a great asset for you.

There are two specific policies you must always follow when providing youth programming, whether through 4-H or another organization:

- **Remain “Above Suspicion”.** This policy is also called the “Rule of Threes.” It is the idea that you should avoid adults being in a one-on-one situation with a child. The purpose is to provide a safe and caring environment for all program participants and to protect yourself from accusations of abuse. Stay in groups of three or more at all times. Before an activity, imagine how all phases of the activity will proceed and anticipate problems, such as a medical emergency, a parent being late to pick up their child, or even a child needing to go back to a building to use the restroom.
- **Be a mandatory reporter.** In Virginia, anyone involved in the education or care of children, including volunteers, has the responsibility to report any suspicion of child abuse or neglect. Suspicion means a “reasonable cause to believe that an individual has been abused or neglected.” There is a statewide, 24-hour hotline to call at 1-800-552-7096, and the report must be made within 24 hours. You should also report the suspicion to your chapter advisor and the VMN State Program Office. Otherwise, maintain confidentiality throughout the process.

Weather and Environmental Hazards



[Weather](#) by Chameleon Design from the [Noun Project](#).

Much of your work and programming as a VMN volunteer is done outdoors. Weather and

environmental factors are risks that you will encounter regularly.

Some examples of these risks include:

- Hot temperatures and sun exposure, which can lead to dehydration and other heat emergencies;
- Cold temperatures, which can lead to hypothermia or frostbite;
- Weather events, such as ice, thunderstorms, high winds, and flooding;
- Terrain issues associated with the outdoors, such as uneven surfaces, steep terrain, tripping hazards, and slippery surfaces.

Strategies you will want to employ to minimize risks from these hazards include:

- Walk the trail or visit the site ahead of time to make sure you are familiar with it and to anticipate hazards.
- Wear clothing that is appropriate for the weather conditions and bring additional clothing, such as a rain jacket, for weather that might arise.
- Use sun protection, including sunscreen, long sleeves, hats, and sunglasses.
- Carry plenty of drinking water.
- Avoid prolonged physical exertion and/or exposure to extreme heat or cold.
- Allow time for breaks and rest.
- Monitor and be prepared for changing weather conditions.
- If you are leading other people in the activity, encourage them to use these same behaviors.

Contact with the Public



[Meeting](#) by Sergi Delgado from the [Noun Project](#).

Even when you are not leading a public event, it's likely you will encounter other members of the public as you are doing your activity, especially if you are in a public area like a park. Plan ahead for these encounters; they are a chance for you to leave

someone with an impression of the VMN program, its sponsoring agencies, and the service project you are doing.

Help ensure that the impression is a good one by following these strategies:

- Wear your name tag that identifies you as a Virginia Master Naturalist volunteer
- Be aware of what entities you are representing, including the VMN program, Virginia Cooperative Extension and other sponsoring agencies, and local partner organizations.
- Be a good role model.
- Make good use of opportunities for informal educational contacts by being prepared to provide a brief and friendly explanation of what you are doing for members of the public who may be curious.
- Use appropriate behavior and language.
- Show respect for other people and property.

Contact with Plants and Wildlife



[Tick](#) by Ben Davis from the [Noun Project](#).

VMN programs are all about connecting with plants, wildlife, and natural places! Even so, there are a few risks for which you need to prepare and help others in your group prepare.

Some typical plants and wildlife that you may encounter that could pose a risk include:

- Ticks
- Chiggers
- Yellow jackets
- Venomous snakes
- Bears
- Poison ivy
- Stinging nettles

Prevent tick bites and tick-borne diseases. Ticks are a very real and serious risk for anyone who spends time outdoors. Learn to recognize ticks, and follow the recommendations of the Virginia Department of Health (VDH) for preventing tick bites. Encourage the participants in your programs to follow these same recommendations!

These recommendations include:

- Recognize when you are in potential tick habitats and avoid brushing up against vegetation when possible.
- Dress appropriately, with long pants tucked into your socks and a long-sleeved shirt tucked into your pants. Light colored clothing will help make ticks more visible.
- Use the right repellants on your skin and clothing. See the VDH list of what has been shown to be effective.
- Conduct thorough tick checks promptly after you spend time in tick habitat and remove any ticks you find.
- Dressing appropriately and using repellants will also help protect you from chiggers, mosquitoes, and other biting invertebrates.
- For more details, see the VDH flyer on ticks at <https://www.vdh.virginia.gov/content/uploads/sites/12/2019/08/Tick-borne-Disease-in-Virginia-Flyer-8.5-x-11-format-for-website-pdf>

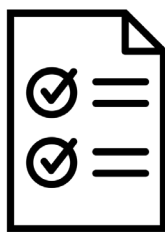
Watch for yellow jacket nests, especially in the late summer and fall when their colonies are the largest and the wasps tend to be most aggressive. They usually nest in cavities, including holes in the ground and rotting tree stumps.

Learn to identify the three species of venomous snakes in Virginia. Give venomous snakes a wide berth if you see them. A simple but effective precaution is to always avoid putting your hands or feet anywhere you haven't looked first. For example, stepping up on a log rather than just over it will allow you to check for wildlife on the other side before stepping down. A hiking pole can help you probe tall grass before walking through it. Learn more from the Virginia Department of Wildlife Resources (DWR): <https://dwr.virginia.gov/blog/season-of-the-snake/>.

Keep a respectful distance from bears. Usually making some noise is enough to cause them to move away from you. Learn more from DWR at <https://dwr.virginia.gov/wildlife/bear/becoming-bear-aware/>

Learn to recognize poison ivy especially, as well as other plants that can harm you on contact, such as nettles and poison sumac. If you are leading other people at a site with a lot of poison ivy, be sure to point it out as part of your safety talk at the beginning of the activity. Learn more from this Extension publication: <https://www.pubs.ext.vt.edu/426/426-109/426-109.html>.

Field Etiquette, Rules, and Laws



[Protocol](#) by Justin Blake from the [Noun Project](#).

Along with keeping ourselves safe from the wildlife, we also want to keep the wildlife safe from us!

Be sure you are following the rules for the site, whether it is federal, state, local, or private property.

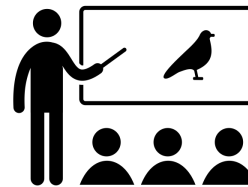
- Do not go onto private property without documented permission.
- Do not collect, remove, or handle wildlife, plants, or habitat unless it is required for your project and you have the necessary permissions and permits to do so.
- Most activities that involve handling or manipulating wildlife, including dead animals or their parts, require a permit from the DWR. Be clear on what permits are required, who holds the permit, and whether you are listed on the permit before engaging in wildlife-focused citizen science projects. <https://dwr.virginia.gov/permits/>
- To avoid spreading diseases that can devastate amphibian populations, clean any boots and gear

that have been in an aquatic habitat before visiting another site. This publication describes disinfection procedures:

http://www.northeastparc.org/products/pdfs/NEPARC_Pub_2014-02_Disinfection_Protocol.pdf.

- Help reduce the spread of invasive species. Check your clothing, shoes, and equipment for seeds, plant parts, and other organisms before leaving the site. A boot brush, duct tape, and extra water for rinsing can be helpful in this process.
- Follow “Leave No Trace” principles and guidelines to minimize impacts of your activities. See <https://lnt.org/research-resources/leave-no-trace-for-the-outdoor-workplace/> for examples.
- For stewardship projects make sure you understand and implement proper techniques for planting, tool use, trail creation, etc. Make sure you understand and demonstrate proper tool use.
- Volunteers may not apply pesticides (including herbicides) unless they are certified applicators or registered technicians. This is a state regulation from the Virginia Department of Agriculture and Consumer Services.

Information, Protocols, and Scientific Integrity



[Nature teacher](#) by corpus delicti from the [Noun Project](#).

Virginia Master Naturalists are involved both in gathering information and data (through their citizen science projects) and in sharing information (through their education projects.) In both cases, a focus on objective, unbiased information is important.

- Follow citizen science protocols. For citizen science projects, understand the protocols before collecting data. Make sure to follow directions on what to record, how to record it, and where to

share the data. Make sure you understand and demonstrate the correct use of any equipment.

- Stick to research-based information. For education projects, including tabling at events, be sure you are sharing only sound, research-based information and recommendations. Information from VMN state sponsoring agencies is the best place to start.
- Be aware how advice or identification help you provide may be used by the recipient. Use publications from VMN sponsoring agencies to support your statements, and refer people to professionals when needed.
- Follow copyright laws. When creating educational or marketing materials such as presentations and displays, be sure you have permission to use any content that is not your own. Keep documented permissions on file in case the material is called into question. You should never download photos and artwork from the Web to use on your websites, slide presentations, and/or publications without gaining permission from the content owner. Learn more about copyrights from the Virginia Tech Library: <https://guides.lib.vt.edu/oa/copyright>
- VMN volunteers may not suggest any specific chemical controls (i.e., herbicides and pesticides). You may state generally that chemical controls may be recommended for certain invasive species and then refer the public to an Extension office or Virginia Department of Forestry office for specific recommendations to match their species, settings, and needs. Note that the VMN program is different than the Extension Master Gardener program in this regard, because Master Gardeners are trained to use the most current version of the Pest Management Guide, as required.

Administrative Risks



[Contract](#) by Nawicon from the [Noun Project](#).

- Volunteers are not authorized to sign any contracts on behalf of the Virginia Master Naturalist program or its sponsoring agencies. If you need a contract signed, please contact our VMN State Program Office, and we will assist you with the process of having Virginia Tech review and sign the contract. The most common contracts you likely will encounter are those for booking event spaces. Be sure to allow plenty of time, ideally at least six weeks, in case the contract requires some negotiation.
- Make sure you understand the civil rights responsibilities of VMN volunteers, such as making sure your programs are accessible and non-discriminatory. Use all reasonable efforts to invite and welcome a diverse group of participants. Use the non-discrimination statement when advertising programs (see https://drive.google.com/file/d/1_-qbkUwW8V8k8f0j0JRd2I4tcQzOc3Mr/view).
- Use the ADA statement when advertising events. Communicate with your chapter advisor when you are advertising programs, because your advisor may need to be listed as the contact for ADA accommodation requests so that a work phone number can be provided. See <https://drive.google.com/file/d/1oliLrMaOL5WYJextNGRMDrJKtQvsQfbG/view>.
- It is recommended that you obtain signed media releases when photographing or videotaping minors and people who are not VMN volunteers if you intend to publish the images online or in print.

Additional Resources

Prysbly, M. D. 2020. Risk Management for Virginia Master Naturalist Volunteers. PowerPoint presentation.

<http://www.virginiamasternaturalist.org/risk-management.html>

Visit Virginia Cooperative Extension: ext.vt.edu

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Appendix I: Risk Management Planning Worksheet

This worksheet is a tool to help volunteers think through the logistics of an activity or event with risk management in mind. It is adapted from the Risk Management Planning Worksheet for 4-H Programming at https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/388/388-051/388-051-PDF.pdf.

Description

Who is involved in the activity? What are participants asked to do? When will the activity be offered? Where will the program be conducted? Why is this program being conducted?

Volunteers

How many volunteer leaders are needed for this activity to provide adequate supervision of the other participants? What knowledge and skills do volunteers need in order to fulfill their responsibilities? What training and communications will you provide to make sure all the leaders are aware of the safety practices and procedures for this activity?

Safety Procedures

What safety procedures are needed for the activity? Are there some general precautions to be taken? What specific risks should be considered due to the nature of this activity, the time of year that it is being offered, the location, and the number and type of participants?

Medical Procedures and First Aid Practices

What will you do if participants become injured or ill during the activity? How far will you be from emergency medical help? Can you get a cell signal from the location? Where is the nearest hospital?

Participant Communications

How will participants be informed of the nature of the activity, the schedule, and the safety procedures? How will you register participants? What instructions will you provide at the event?

Other

Is there any other important information not covered above?

Appendix II: Risk Identification Worksheet

This worksheet is a tool to help volunteers identify and plan for the risks they are likely to encounter for any activity they are planning to do. It has been adapted from the Risk Management Strategy Matrix for Volunteer Service Projects by the Historic Rivers Chapter of the Virginia Master Naturalist program.

Categories of Risk	Specific Risks for this Activity/Event	Procedures to Manage These Risks
General Personal Safety		
Duty of Care		
Vulnerable Populations		
Weather and Environment		
Contact with the Public		
Contact with Wildlife/Plants		
Field Etiquette, Rules, and Laws		
Information, Protocols, and Scientific Integrity		
Administrative		
Other Risks		

Appendix III: Field Work Risk Management Checklist

This checklist is a tool to help volunteers who are leading field trips, nature walks, or other outdoor education or service events.

<input type="checkbox"/>	Be Aware of Potential Risks	<ul style="list-style-type: none"> • weather issues (wind, lightning, excessive heat or cold) • uneven, slick surfaces on trails • ticks and various biting or stinging insects • physical exertion, such as from standing for long periods • possible separation from the group • (Identify other relevant risks for the particular activity.)
<input type="checkbox"/>	Pack Necessary Items	<ul style="list-style-type: none"> • first aid kit • incident report forms • VMN/VCE Emergency Card • directions to site with address in case EMS needs it • any notes or documentation of risk management plans • cell phone • registrant list with contact information • site permits or activity permissions, if applicable • (Identify other necessary items for the particular activity.)
<input type="checkbox"/>	Know What To Do In An Emergency	<ul style="list-style-type: none"> • In an emergency, CALL 911 and follow the procedures on the VMN/VCE Emergency Card. • If possible, obtain permission from the injured person to assist them. • Keep your chapter advisor informed using their information from the VMN/VCE Emergency Card. • Complete the incident report form for incidents more serious than minor cuts and scrapes. Submit any incident report forms to your advisor and to the VMN state program office. • Provide first aid at the level at which you are trained or certified. Provide supplies for the injured person to administer to themselves if they are able. • Do not leave injured person behind on their own; arrange for someone to stay until help arrives.
<input type="checkbox"/>	Provide Oversight During the Event	<ul style="list-style-type: none"> • Use registration forms or check-in sheets to document who is in attendance. • Provide clear instructions and safety precautions at the beginning of the activity. • Ask participants to make the leader aware (privately) of any medical conditions that may be an issue during the activity. • Stay aware of weather conditions and change plans accordingly. • Make sure that participants have opportunities to stay hydrated and to rest. • Account for everyone going and returning before you leave. If they want to leave early or ride with someone else, make sure they tell you. The buddy system can help with this as well. • Remind everyone to do tick checks during and after the field trip.