Guide To Hosting a

POLLINATOR HABITAT PROJECT

"Every little bit helps. It's amazing how much you can do when you choose to give a little bit of that natural habitat back."

-Roxanne Paul

PHEASANTS forever The Habitat Organization

QUAIL forever The Habitat Organization

EDUCATION AND OUTREACH

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INTRODUCTION

Our E&O series of guides to hosting events are designed to provide an outline of information, tips and support for planning and delivering high quality events that engage youth, families and interested adults in outdoor activities. Guides include information that will provide a safe environment for participants that encourages participation, inspires learning, develops skills and fosters an affinity for PF/QF and our mission. Research shows that it takes multiple outdoor experiences and continuing support to cultivate a new hunter, shooting sports enthusiast or land steward. Using the entire series of guides can help chapters engage participants in multiple outdoor activities throughout each year. Used in that way, participants will be provided the skill building opportunities and continuing support necessary to cultivate hunting conservationists and land stewards.

A CONSERVATION MESSAGE

Our Mission & Model

Pheasants Forever & Quail Forever is dedicated to the conservation of quail, pheasants and other wildlife through habitat improvements, public awareness, education and land management policies and programs.

Established in 1982, we are a grassroots, volunteer, membership-based organization and our members are a diverse group of hunters and non-hunters alike. Our business model sets us apart from other organizations in that our chapters are empowered to determine how they spend locally raised dollars on mission related activities. We are proud to boast Charity Navigator's top rating and we have a history of putting more than 90 cents out of every single dollar raised back to our mission – placing us among the nation's most efficient non-profit organizations.

What We Do

The wildlife habitat work that Pheasants Forever & Quail Forever has accomplished has garnered us the reputation of "The Habitat Organization," a tagline we are extremely proud of. Annually having a positive impact on hundreds of thousands of acres of wildlife habitat, putting high quality habitat on the landscape is still at the core of our mission today. Our advocacy efforts at local, state and national levels has incredible impact on conservation policy. Finally, our chapters and volunteers share our outdoor traditions and conservation message with nearly 100,000 youth, families and interested adults each year to make sure that we are cultivating the next generation of hunting conservationists and land stewards.

Why It Is Important

In the 1900s many species of wildlife were near extinction. It was hunters who stepped forward to help pay for and support conservation programs to restore many wildlife species. By buying hunting licenses and taxing themselves on equipment such as firearms, ammunition and clothing, hunters contribute the majority of funding for wildlife conservation in North America.

The North American Model of Wildlife Conservation states that wildlife and fish belong to all citizens and should be managed in a way that will sustain healthy populations forever. This would not be possible without individuals and organizations like Pheasants Forever and Quail Forever that help raise millions of dollars for wildlife conservation and enhance millions of acres of wildlife habitat.

Clean water, clean air, healthy soil and a healthy environment benefits everyone. When you enjoy a hunting experience, listening to songbirds or watching a monarch butterfly, thank a hunter who has helped make sure there is quality wildlife habitat for those species and others. Better yet, join us in our efforts and do your part.

How You Can Help

An engaged, informed and passionate base of Pheasants Forever &Quail Forever members is the most powerful tool we have when it comes to putting more habitat on the ground, birds in the sky and raising the next generation of citizens who care. You are encouraged to do your part by becoming a member of Pheasants Forever or Quail Forever. We want you to join us and the future of wildlife conservation. Our hunting heritage depends on you!

Overview

PF/QF's Pollinator Habitat Program is designed to provide support for over 750 grassroots chapters to engage youth, families and communities in establishing, maintaining and monitoring pollinator habitat areas across the country. Working with local community partners, chapters will use their expertise, equipment and networks to create habitat projects that involve youth, families, schools and community groups. The results will benefit pollinators as well as establish critical brood rearing habitat for quail and pheasants. Support will include guidelines on how to establish and maintain projects, educational materials and monitoring activities to evaluate the success of the project.

ENGAGING CLASSROOMS, COMMUNITIES AND YOUTH GROUPS

One of the major objectives of the Pollinator Habitat Program is to educate and engage participants in all aspects of your project. Chapters are encouraged to engage schools (classrooms) as we can offer curriculum that teachers can use in the classroom in conjunction with the hands-on pollinator project. This way, students not only get outside and learn about conservation in a hands-on manner, they also learn about conservation in the classroom. If you are unable to work with your local school, other community groups like 4H, Boy Scouts, Girl Scouts, FFA, Master Gardeners, Bee Keepers, Local COOPs, Organic Farmers are examples of organizations or groups that might be willing to get involved in the project. You will find that when you approach the school administration, teacher or group leader with the details of the program, they will be more than willing to partner in your efforts. You should try to get in touch with the community group you wish to work with at least six months prior to your event.

CURRICULUM

Curriculum is available to chapters that are working with schools and classrooms to establish, maintain, and monitor pollinator habitat projects. The curriculum is free of cost and can easily be downloaded and emailed to the teacher you are working with on your project. You can download vrious types of pollinator curriculum on our blog at www.pfqfhabitated.blogspot.com.

This successful pollinator project was planted by 3rd graders in Shelby, MO.

PLAN YOUR EVENT

In most situations you will need to apply a general herbicide (glyphosate) to kill the existing vegetation prior to planting your project site.

Site Selection & Design

At this point, you probably already have a location in mind for your project. If not, you should try to select your site at least six months in advance of the planting date to insure adequate site preparation. When selecting your site, there are a couple key things to keep in mind in order to get the most wildlife and educational value out of your project.

- Pollinator projects must be a minimum of 1/2 acre in size.
- If planted in a strip, strip must be a minimum of 20 ft. wide.
- Site must get at least 6 (or more) hours of direct sun a day.
- Site should occur in or near existing wildlife habitat (i.e. adjacent to or within a CRP field or Wildlife Management Area) in order to get the maximum wildlife benefits.
- Since you will be engaging kids in the establishment/maintenance of this project, make sure your site can be accessed by a vehicle (bus) or short walk.
- Locations that can be seen by the general public are encouraged to help promote your chapter and the pollinator program

Selecting Your Seed Mix

You are encouraged to purchase your pollinator seed mixes from Pheasants/Quail Forever (PF/QF) unless you are able to get your seed donated from a local seed vendor. PF/QF state specific pollinator seed mixes have been designed by wildlife professionals to accommodate the needs of specific soil types and climates in your state, to provide quality wildlife habitat and to meet the minimum requirements of USDA conservation programs. When you purchase your seed through PF/QF, you are also helping support additional habitat and youth education projects across the country! To order your PF/QF pollinator seed mix, please contact Drew Larsen (308-293-1194 or dlarsen@pheasantsforever.org). You should contact PF/QF approximately one month prior to planting your project to ensure timely delivery.

If you do purchase your seed from another vendor, the seed mix must meet USDA pollinator habitat specifications, which are required for all pollinator habitat projects. (Note: You are encouraged to create mixes that go beyond the minimum specifications. The more species you plant, the more beneficial your project will be to wildlife.) Below you will find the minimum USDA specifications for creating a pollinator seed mix:

- A minimum of 9 native wildflower species (wildflowers, legumes and shrubs) must be planted on the project (20 or more species is encouraged to increase wildlife value of project.)
- At least 3 species shall have their primary onset of blooming during each period of April-June 15, June 15-July and August-October.

Ordering Plugs and Shrubs

In addition to ordering a pollinator seed mix, you are also encouraged to order plugs for your pollinator habitat project. Plugs, by definition, are young native plants that are started in a greenhouse. By planting plugs, you can really give your planting a "jump start" by allowing participants to see blooming wildflowers quicker than they normally would through a broadcast seeding alone. Plugs also help reduce weed competition on the site because the plant is already actively growing when you put it in the ground, which helps out-compete annual weeds that are certain to grow. If your project is more urban in nature, you certainly want to order as many plugs as you can afford. Native shrubs are another component to consider for your planting. Shrubs can serve as an excellent food source for pollinators and they also benefit many species of grassland birds. When ordering your plugs and shrubs, be sure that they are not treated with insecticides. You will also want to order your plugs and shrubs as early as possible. Most suppliers would like you to place orders sometime in January or February. If you wait until the last minute to order, many popular species will be sold out. Visit Plant Native's website to find a nursery near you using your zip code at www.plantnative.org.

Site Preparation

Proper site preparation is very important to the success of your planting. For best results, the site should be tilled or disked just prior to planting your pollinator mix. Tilling/disking the ground prior to planting will provide a proper seed bed for your planting and allow for good seed-to-soil contact. In addition, removing all existing vegetation will help avoid competition from other weeds and grasses. If your site contains any perennial weeds or sod-forming grasses (i.e. smooth broom/fescue), it is recommended that you apply herbicide (Round-Up) prior to tillage/disking. This process will help reduce competition from grasses and invasive weeds, and it will also make tillage much easier. You should strive to have a clean seed bed free from any plant matter and debris that would inhibit plant germination or seed-to-soil contact. This may require that you till the site more than once to get desired results. If you don't have the equipment necessary to conduct the proper site prep, consider hiring someone to conduct the site prep for your project. Landscaping companies, local COOPs, local farmers, lawn care companies and nurseries are good places to solicit help for your site prep needs.

When to Plant Your Pollinator Mix

In most areas of the country, there are two basic times to plant your pollinator project (spring & fall). Each season has its advantages and disadvantages, but location, climate and annual rainfall amounts will help determine when you should plant your pollinator project.

If you intend to have your youth participants plant your project by hand broadcast seeding the site, we encourage you to till the project site after a successful herbicide application to insure good seed to soil contact.

If you are planting in the spring, you should try to time your planting as early as possible but not until the potential for a killing frost has passed. The one big advantage of planting in the spring is the fact that you can adequately prepare the site before planting. A spring planting will allow you to remove any weed or grass competition prior to planting your pollinator project. The one disadvantage of planting in the spring is missing some timely early spring rains that can be so beneficial for seedlings.

If you are planting in the fall, you should wait until after a killing frost. A fall planting (dormant planting) can take place any time after a killing frost up until the ground freezes. A fall planting is advantageous over a spring planting as it will be able to take advantage of early spring moisture and will be much further ahead than a spring planting. If your site is susceptible to soil erosion, you should not conduct a fall planting as the ground will have to remain bare throughout much of the fall and winter.

Project Publicity

Pollinator projects attract positive publicity and you and your chapter should take advantage of this fact and contact your local newspaper or TV station and invite them to your event. Don't assume they will just show up. It's always best to provide a personal invitation to get them to attend. This is a great opportunity for you to promote your chapter and all the great things you do throughout the year. You should contact your local media at least one month prior to your event. If the local media can't attend, you can find sample press releases to send them at www.pfqfhabitated.blogspot.com.

"Outdoor learning experiences are very important. The more we can expose students to hands-on outdoor activities, the more likely they are to do them when they become adults and leaders in our society."

Leda Schreiner – High School Ag Instructor Chillicothe, MO

DAY OF THE EVENT

AGENDA

1. 1:00 PM: Welcome & Introductions (5 minutes)
2. 1:05 PM: Break-Up Into Small Groups (5 minutes)
3. 1:10 PM: Activity Stations (~1 Hour)

Group	1:10 PM	1:30 PM	1:50 PM
Group A	Station 1	Station 2	Station 3
Group B	Station 2	Station 3	Station 1
Group C	Station 3	Station 1	Station 2

4. 2:10 PM: Broadcast Seed Project Site (20 minutes)
5. 2:30 PM: Plant Plugs (20 minutes)
6. 2:50 PM: Group Photo (5 minutes)

Educational Activities/Stations

Since this is an educational program, you are encouraged to incorporate a number of educational activities/stations into your planting event. Adding these activities to your event also helps lengthen the event as it does not take long to plant a 1-2 acre plot. The staff at PF/QF has put together a number of educational activities that you can use the day of your event, or you can create your own stations and offer unique educational activities tied to conservation and wildlife habitat. Examples of possible educational activities include the following:

- Plant I.D. Contest
- Making Pollinator Seed Balls
- Making Native Bee Nesting Blocks
- Making Native Bee Nesting Tubes
- Pollinator Free Pizza
- Pollinator Free Tacos
- Pollinator Free Sandwiches
- Pollinator Free Ice Cream Sundae
- Local Bee Keeper
- Local biologist

You can download many of the activities above from our blog at www.pfqfhabitated.blogspot.com. Provide as many educational stations as you like, but it is recommended to have at least three stations at your event. As soon as the students arrive at the planting site, you will want to break them into small groups. If you are running three educational stations, break the large group up into three small groups and send each group to a station. Run your stations no longer than 20 minutes and then have the groups rotate to the next station (see example event schedule below). After the groups have been through each station, you can move onto seeding the project site.

Planting Your Pollinator Seed Mix and Plugs

Since you will be engaging participants in your pollinator project, it's best to have them broadcast seeds evenly by hand or by use of a hand fertilizer spreader. Buckets (1-2 gallon) work great for students to carry and mix their seed. It's helpful to mix seeds in a carrier such as clean, dry sand or saw dust as this type of carrier adds volume and aids in even distribution of your seeds. It also helps with being able to see where you have seeded on your site. We recommend using a ratio of 10 parts carrier to 1 part seed.

Once you have your seed mix and seed filler mixed at the recommended ratio, divide the seed evenly among all the students. Each student should have a 1-2 gallon bucket or fertilizer spreader. Next, evenly line up (arm length apart) the students along one side of the field you are planting. Have the students walk across the field in a straight line evenly broadcasting seeds as

they walk to the opposite end of the field. After you have completed one pass, line the students up along another side of the field so they will be walking at a 90 degree angle to your first pass. This insures a nice even distribution of seed. Be sure to divide up the seed amongst the students in a way that you have a little extra at the end in case you need to go over a few more spots. If you don't have enough students to efficiently seed the entire site in one pass, divide your site into sections small enough to efficiently cover each section.

After you have seeded the entire site, have your students hand plant plugs and shrubs. If you have nice loose soil, plugs and shrubs can be planted by hand. If your soil is not loose enough to plant plugs and shrubs by hand, then have the students use a dibble bar or small garden tool for planting. It is recommended that you plant your plugs in groups of the same species with individual plugs planted no closer than one foot apart. Shrubs should also be planted in small thickets of the same species. It is recommended that thickets be a minimum of 1,500 square feet with approximately 250 shrubs per thicket.

EVENT REPORT FORM & SIGNAGE

Pheasants Forever and Quail Forever offers customizable signs like the one you see in the photo for your chapter's pollinator project.

After your event is complete, be sure to fill out an NCLI Event Report form. The information you provide on this form is very important and will help us secure additional support for the program in the future.

In addition to the NCLI Event Report, your chapter should also consider some kind of signage for your project site. Signage not only helps promote your chapter's efforts, but it can also be used to educate the general public about pollinators and pollinator habitat. You can purchase Pollinator Habitat signs through PF/QF, or you can make your own to help promote your project. Be sure to include the names or logos of any partner who helped fund the project.

PROJECT MAINTENANCE

Expect your project to contain weeds the first two-three growing seasons. If these weeds are not aggressive or noxious in nature, it may be best just to let the natural succession of plant diversity take place. Many annual weed species offer great food sources for ground nesting birds and pollinating insects. Over time, the perennial wildflower species you planted will out-compete weed species that are present in your planting. Patience is sometimes all that is needed for your site to reach full potential.

If noxious weeds become a problem in your planting, then some maintenance must be done to eradicate the species. Some conditions must be dealt with promptly while others may be corrected at a later time. The following are maintenance techniques that may need to be applied to your project to address weed issues:

- Supplemental Plantings/Reseeding
- Weed/Grass Control
- Prescribed Burning/Fall Mowing

Supplemental Plantings/Reseeding

If you are not happy with the diversity of your planting, you can continue to add species by reseeding or supplemental plantings. Bare areas, if any, can be over-seeded with the original pollinator mix or with a custom mix. When reseeding, some scarification of the soil surface may be necessary to ensure good seed-soil contact. You should follow the same planting procedures and timing as the initial establishment when reseeding. If there is a certain species you would like to add to your planting, you can also purchase actual native wildflower plants at a local nursery to supplement your original planting. Conduct this supplemental planting in the spring when native wildflower plants become available at local nurseries.

Weed/Grass Control

A regular weed control program is essential to a successful pollinator planting, especially if your planting becomes dominated with noxious weeds. Noxious weeds should be eliminated as soon as they can be recognized, either by pulling or spot-spraying with a general herbicide. Be sure to consult your local extension office prior to applying any herbicides to your pollinator planting. They can recommend specific herbicides and rates to insure success. Not all weeds are detrimental to your planting. In many cases, it takes 2-3 years before some perennial wildflower species actually bloom. Please be patient with your planting, and know that some of those early successional weeds make very good pheasant and quail brood rearing habitat.

Prescribed Burning/Fall Mowing

In order to maintain a diverse pollinator planting, some prescribed burning or mowing may be required. You should only conduct these management activities if you see your planting becoming less diverse over time or if it becomes dominated by grasses. Research has shown that fall prescribed burns/mowings are best to stimulate wildflower growth for the following growing season. Spring burns and mowings seem to favor grasses over forbs. Prescribed burns are favored over mowing as they are much more effective at stimulating forb growth the following growing season. When prescribed burning is not possible, mowing is the next best alternative to burning. If you mow, make sure you mow as high as physically possible. The frequency by which you burn/mow will depend on the status of your planting. If you are happy with the diversity of your planting, no burning or mowing is needed.

PROJECT MONITORING

In an effort to monitor the success of the project, chapters are encouraged to engage students in a monitoring activity on the project site. The monitoring part of the project can be led by the chapter or by the teacher/group leader. There are a number of citizen science monitoring activities that can be used in conjunction with your pollinator habitat projects. These citizen science monitoring activities are designed to engage students in the data collection of actual research projects being conducted by universities and biologists. Data collected at these sites will aid professors and biologists in answering important questions and possibly impact pollinator conservation policy. In addition, students will learn about the scientific method and see the results of their efforts. A complete list of citizen science monitoring activities can be found at http://www.xerces.org/citizen-science/pollinator-citizen-science/

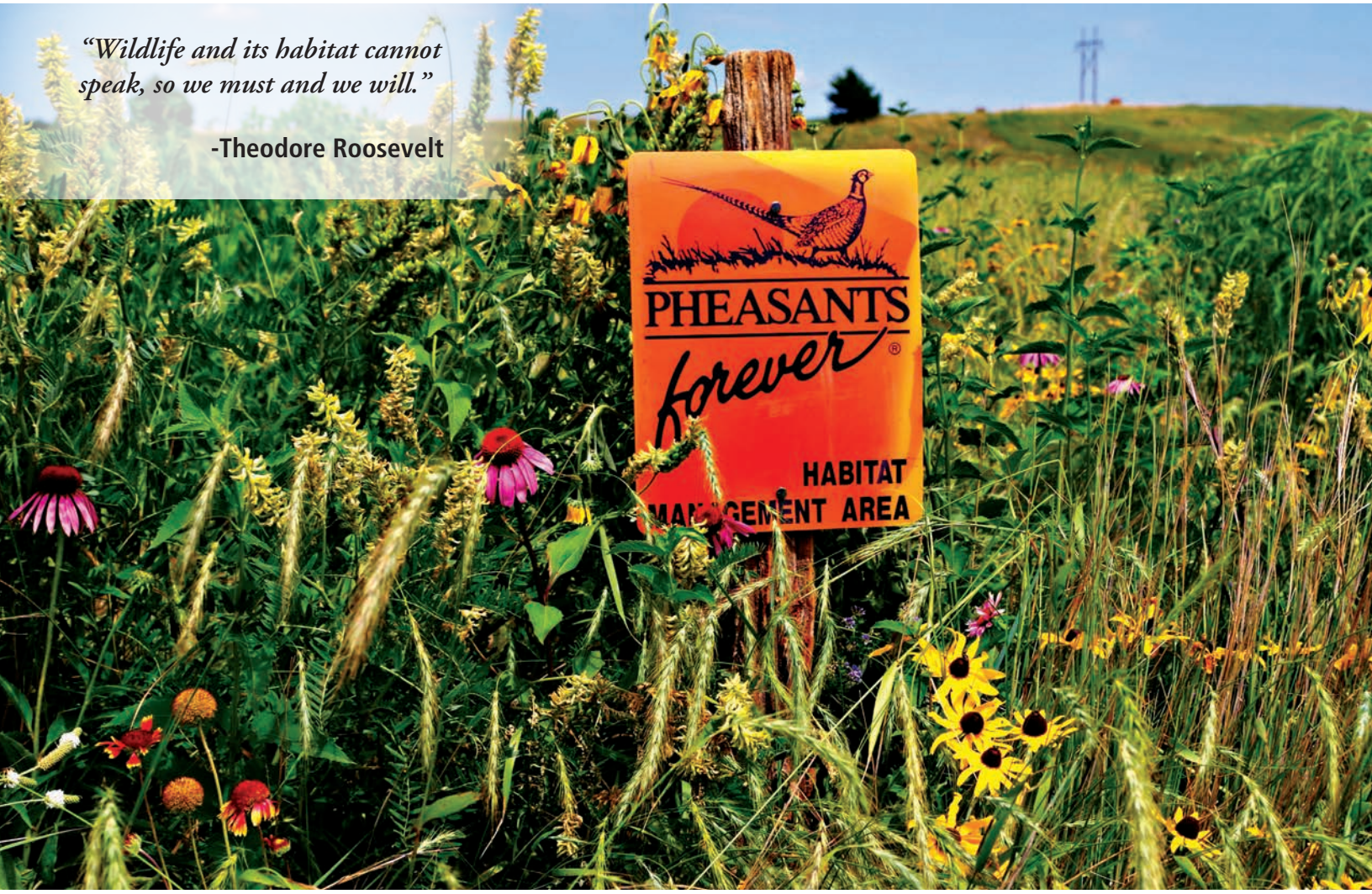
OTHER THINGS TO CONSIDER

While not required to complete a successful project, chapters are encouraged to purchase t-shirts and memberships for all participants. This gesture is a cheap way to continue to educate students about conservation and our organization through the Forever Outdoors magazine. This is also a great way to increase your banquet invite list. You will be surprised about how many students will show up at your next fundraising event once they have had a positive experience with your chapter.

If you purchase t-shirts for participants, try to get them to the students prior to the actual event. Having all the kids in a PF/QF shirt will make great newspaper photos and you will find that students will wear their free shirt throughout the year providing additional promotion for your local chapter. You can purchase youth PF/QF shirts through the PF/QF Market Place.

Pheasants Forever and Quail Forever T-Shirts are a great addition to your project and they look great for photos!

"Pheasants Forever and Quail Forever are non-profit conservation organizations dedicated to the conservation of pheasants, quail and other wildlife through habitat improvements, public awareness, education and land management policies and programs."



PROGRAM CONTACT INFORMATION

All questions regarding the Pollinator Habitat Program should be directed to Drew Larsen, Pheasants Forever's National Habitat Education Specialist.

Email: DLarsen@PheasantsForever.org Phone: 308-293-1194

All applications, forms and documents listed in this guideline book can be downloaded from our website at www.pheasantsforever.org/getdoc/2f1ac3ee-28b3-438a-971b-97eaa9073477/Document-Center.aspx.

CONGRATULATIONS AND THANK YOU!

You are about to participate in one of the most rewarding activities Pheasants Forever & Quail Forever can offer a volunteer – an opportunity to share the outdoor traditions we cherish and mentor the next generation of hunting conservationists and land stewards.