

Tying Flies for Conservation

The Forest Pest Project



*Reducing the human-caused spread of
aquatic invasive species by promoting
voluntary behavior change*

Tying Flies for Conservation The Forest Pest Insect Project

Thanks for your interest in our fly tying program that teaches anglers how to recognize forest pest insects, what to do about them and how to avoid spreading them. By joining in this effort you are becoming an important part of the fight to protect and preserve our forests.

Pest insects are a significant threat to our forests and the waters they support. The best response we have to these insects is to discover them early. The best way to do this is if lots of people are looking. Very few people spend more time looking at insects than fly anglers and this program is aimed at teaching anglers to recognize the insects we are most concerned about so that they can report them.

This program is really easy to understand. Tiers will learn to tie fly patterns that accurately represent the insects we are concerned about. These trained tiers will then demonstrate these patterns at fly fairs and sport shows and teach the anglers who attend about the problem and the solution. We will provide written materials for distribution about the pest and the program to reinforce the message.

We need volunteer fly tiers for two different parts of this program.

Demo Tiers – we need fly tiers who will learn to demonstrate the pest insect patterns at shows. Our objective here is to teach about the problem and how to recognize the pest. Consequently, we need to insure that the patterns tied result in accurate depictions of the target insect. However, the methods used to tie these flies are totally open to the artistry of the individual tier. We can easily imagine that a demo tier can teach almost any fly tying technique while constructing their fly. We expect some tiers will want to demo a basic pattern and spend their time talking about the pest or the problem. Others may want to demo a specific technique which they incorporate into their version of the fly. Realistic tiers may want to spend an entire demo shift working on one fly while discussing its construction. We encourage you to use your imagination and creativity but make sure the final product is an accurate depiction of the target insect.

No matter what type of pattern you chose to tie, we expect that you will briefly tell observers what insect you are imitating, why we care about them and what the angler should do if they spot one. The Invasive Species Action Network will provide everything you need to tell this story.

Production Tiers – We want to be able to hand out sample flies to hundreds of individuals in order to reinforce our identification message. Our goal is to be able to give every interested person a pest fly to take home. However, we can only do this if we can acquire a significant stock of flies. We need tiers who are willing to tie flies for this use. The hand-out flies will be basic patterns that are easy to tie but are accurate for identification. We will provide sample patterns that can be copied but we will gladly accept all flies that provide the identification characteristics we need.

In addition to the production flies we need for handouts, we are seeking realistic tiers who will tie some flies that we can use for more



Asian longhorned beetle fly attached to information card

advanced purposes. If you tie realistic patterns we really need your help. Most of the people involved in forest health are not fly anglers and most have never even seen a fishing fly. We need to be able to supply these folks with realistic flies just to be able to showcase the artistry and versatility of fly tying.

There are a number of different pest insects that we will be featuring through this effort. For each species we will provide information about the insect, why it is a problem, how to identify it and full details so that you can try to develop your own fly. In addition, we will provide suggested patterns and tying instructions for each species.

Please note: This is a conservation program focused on protecting our forests and waters. The program depends on producing flies that accurately represent specific pest insects. Although many of the flies developed as part of this program will be effective fish catchers, any flies you tie in support of this program must always look like the target insect.

If you want to take a program fly pattern and modify it to be a better fish catcher feel free to do so but do not include that information as part of the conservation program. Also, never attach the pest name to a fly pattern unless it can be used to accurately identify the target insect.

If you would like to learn more or help with this project please contact:

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Asian Longhorned Beetle Fly Tying Demonstrations

Frequently Asked Questions

Q. I am not familiar with Asian Longhorned Beetles (ALB). Do I have to be an expert on them to participate?

A. Actually we don't expect our demonstrators to know much about the insect at all. However, there are a few messages that we expect you to communicate:

- Asian Longhorned Beetles are rarely found in North America
- When the beetle is discovered the response must be very quick to minimize the damage
- In some cases, every potential host tree has to be cut down to prevent the insect from spreading – this can be thousands of trees
- We want fly anglers to learn to recognize the beetle so if they ever spot one they can quickly report it
- Pest insects are easily moved in firewood – if you ever go camping do not move firewood!

Q. Where are ALB found in the US.

A. Currently there are a couple of populations in the East that have not been eradicated. However, live beetles have been discovered in many parts of the country including: CA, FL, IL, IN, MA, MI, NC, NJ, NY, OH, PA, SC, TX, WA, WI. Additionally they have been found in 4 Canadian Provinces.

Q. How do ALB get to North America

A. Most likely they arrive in untreated wood that is used for shipping containers or packing material. A larval beetle can easily travel the oceans in this fashion and emerge once they are here.

Q. Once they are in North American how do they spread?

A. While some spread may occur if infected wood shipping material is transported away from port areas, the most common movement of ALS and other forest pest insects is in contaminated firewood. If firewood is cut in an infested area it is very easy to move it long distances. Never move firewood!

Q. I know I have seen similar beetles. Are there native beetles that look like ALB?

A. There are a number of large longhorned beetles that are native and common. However, none of the natives have the distinctive white spots on their back or the white striped antenna. One native species, the white-spotted sawyer, is somewhat similar but is never more than 1 inch long and only has a single white spot located right between the wings. Also, the sawyer is not the glossy black color of the ALB. Tell people that if they spot a very large black longhorned beetle with white spots to always report it. It is much better to receive false reports that to not get them.

Q. Where do people report sightings?

A. This can be a bit tough as there is no national reporting phone line. However, they can always be reported at beetlebusters.com or, they can be reported to the state agriculture department or to the nearest US Forest Service office.

Q. Do you really have to cut down all the trees to control them?

A. sometimes it is possible to treat without killing surrounding trees. However, often mass removal of trees is the only option. Here are some photos of a removal in Massachusetts.



Before



After

Q. If I am not expected to be an expert on the insect, what do I spend time telling people about?

A. We expect that most demonstrators will spend much of their time talking about tying flies, fly fishing or any of the other topics you touch on as you talk with folks. We want you to feature your tying but we need you to tie flies that can be used for ID and we want you to give the basic message.

Q. I really like the fly I tied and I want to fish with it. Is that OK?

A. We have no problem if you want to experiment with fishing your ALB flies. However, you need to make sure that if you modify the fly for fishing you never call it an Asian Longhorned Beetle fly. We need to save this name only for flies that can be used for identification. If you modify it for fishing give it a different name. Scott Sanchez developed the original ALB pattern for us – he took it, modified it and renamed it the Plumbers Butt Beetle and has developed a great fish catching fly. Just remember to keep focused on the ALB fly when demonstrating as part of the project.

Asian Longhorned Beetle

Asian longhorned beetle (ALB), *Anoplophora glabripennis* is a destructive wood-boring pest of maple and other hardwoods. The trees vulnerable to ALB include Maples (i.e. boxelder, red, silver and sugar maple), Birch, Elm, Willow, Ohio buckeye, Horse chestnut, Ash and Poplar. The beetles attack the trees by boring under the bark where they feed on the new tissue and cut extensive galleries of bored out areas. This leaves the tree weakened and can lead to the death of the tree.

There are few options for dealing with the pest. If an introduction is discovered early it's possible to chemically treat single trees or small groups of trees. However, if the introduction goes undiscovered and the insects become widely distributed there may be no control options except the removal of all potential host trees in the area to insure that the beetles cannot reproduce. While this might mean cutting thousands of trees, it is a small price to pay to protect our forests.

Asian longhorned beetle was first discovered in the United States on several hardwood trees in Brooklyn, New York in August 1996. The beetle is believed to have been introduced into the United States from wood pallets and other wood packing material accompanying cargo shipments from Asia. Once in the US, movement of firewood has been identified as a significant risk for spreading this pest as well as many other pest insects. Consequently, we always want to encourage people to never move firewood.

Since the first discovery, it has been found in trees in: Chicago, Illinois; Islip, NY; Hudson Middlesex and Union Counties, New Jersey; Toronto, Canada; Sacramento, CA; Worcester & Suffolk Counties, Massachusetts; and Clermont County, Ohio. Alert workers have uncovered and reported ALBs in warehouses in CA, FL, IL, IN, MA, MI, NC, NJ, NY, OH, PA, SC, TX, WA, WI, and in British Columbia, Manitoba, Ontario, Quebec and Nova Scotia in Canada.

Although there are new discoveries annually, several of the earlier discoveries have been eradicated. In 2008, after the completion of control and regulatory activities, and following confirmation surveys, ALB was declared eradicated in Chicago, Illinois, and Hudson County, New Jersey. Similarly, in 2011, ALB was declared eradicated from Islip, New York.

Since the beetles can show up any time, in any part of the country, we need people to be able to recognize them and report them if they see them. Many of the original discoveries of the beetle were made by citizens.

“The public is our first line of defense because early detection is crucial and could mean more trees saved,” said Rebecca Blue, Deputy Under Secretary of the USDA Animal and Plant Health Inspection Service (APHIS). “Whether you’re camping, fishing, hiking, or just relaxing in the backyard, be on the lookout for Asian longhorned beetles and signs of their damage. Please inspect your trees at home regularly, and be aware of the risks of transporting forests pests when moving firewood.”

There is a lot of ALB information available on the web, including photos, identification tools and maps. Here are a couple of informative sites to start learning more:

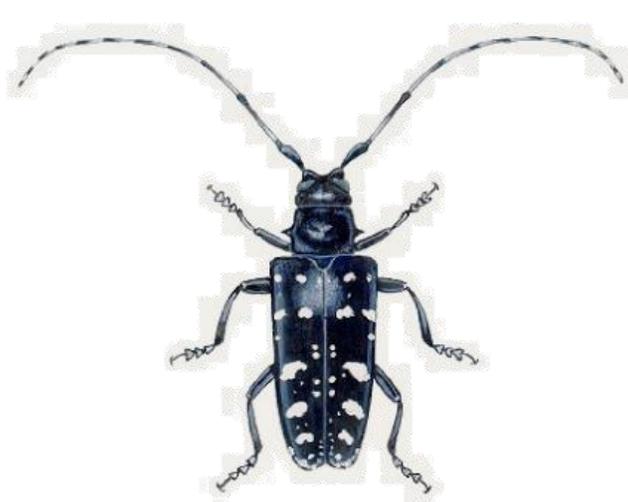
http://en.wikipedia.org/wiki/Asian_long-horned_beetle

<http://beetlebusters.info/>

The Asian longhorned beetle (ALB) has some distinct features that make it very easy to identify. The adult ALB has the following unique characteristics:

- Body is 1 inch to 1 ½ inches in length
- Long antennae banded with black and white (longer than the insect's body)
- Shiny, jet black body with distinctive white spots
- Six legs
- May have blue feet



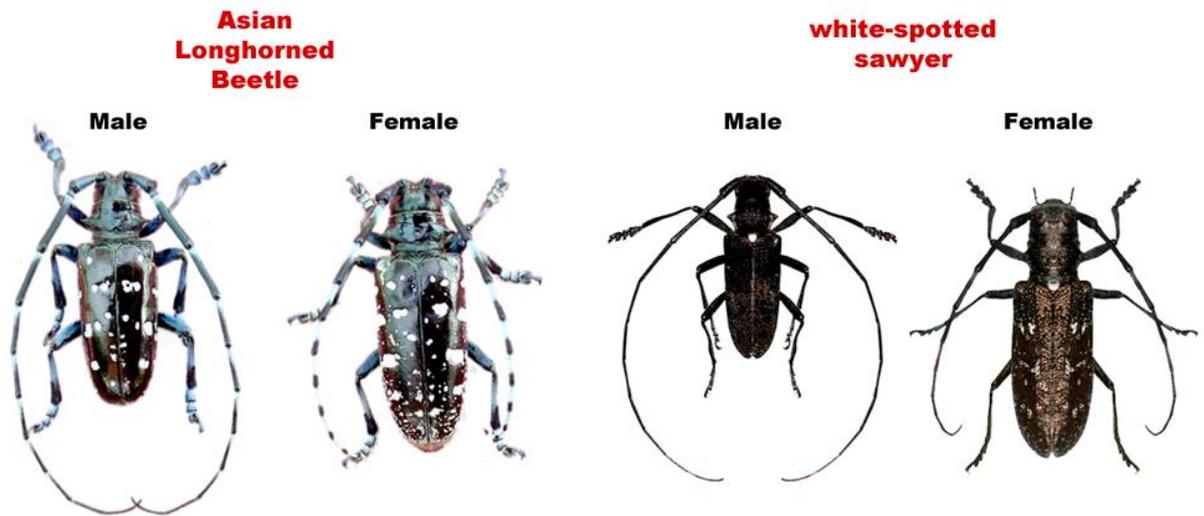


Similar Species

There are a couple of native beetles that are ALB look-alikes. The most common is the White-spotted sawyer, which is often mistaken for the ALB. Here are the telltale differences:

- The White-spotted sawyer has one white dot between the top of its wings. ALB does not have this dot.
- The White-spotted sawyer's wings are rough and bronzish-black as opposed to the ALB's shiny smooth black wings.

We encourage you to tie a white-spotted sawyer as an example to show the differences



Asian Long Horned Beetle Fly Pattern Materials and Steps

Note: This pattern was originally developed by Scott Sanchez, this is a very similar pattern tied by Matt Wilhelm using Scott's fly as a model.

Hook: Dai Riki #700 size 4
Under Body: Large Black Chenille
Legs: Black Rubber Bands (doubled) // three pair
Over Body: Black Foam
Antennae: Black Hackle Stem
Coloration: White Out
Thread: Black 3/0

Steps:

Start thread and attach stripped hackle stems near eye of hook. Arrange stems so they are spread out and away from the hook. If there are light spots on the stems you might have to color over with a black marker.

Take thread to the curve and attach football shaped piece of foam a little wider diameter than the hook gap and slightly longer than the hooks length.

Strip chenille to the thread core and attach at bend of hook. Move thread forward to the 20% area and attach a pair of jointed, doubled rubber band legs on each side at the Half hitch a joint in each leg before attaching.

Move thread forward near the middle of the hook. Attach another pair of doubled/jointed rubber band legs.

Move thread forward to the 90% mark near the eye. Tie in another pair of doubled/jointed legs on each side of the hook.

Wrap chenille forward to the eye going in between the legs when needed and tie off.

Fold foam over the top and tie off and whip finish. Shape the head.

Add white dots (Wite-Out) to back and white stripes on antennae.

