

Tegenaria duellica and Tegenaria agrestis

GIANT HOUSE AND HOBO SPIDERS

ENGLISH NAMES/ SCIENTIFIC NAMES

Tegenaria duellica –
giant house spider
Tegenaria agrestis –
hobo spider

FAMILY

Agelenidae (Funnel-web
spiders)

OTHER SCIENTIFIC NAMES

The giant house spider is
also mistakenly known as
T. gigantea and less
commonly, *T. saeva*

Giant house and hobo spiders are large, moderately hairy spiders that build messy funnel-webs on the underside of objects on the ground.



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RANGE/KNOWN DISTRIBUTION

Giant house and hobo spiders are native to Europe and were introduced to southern Vancouver Island and the Puget Trough early in the 20th century. Giant house spiders, among the most common spiders in Garry oak ecosystems and other parts of the Georgia Lowlands and Puget Trough, are found across southern British Columbia and south along the coast to southern Oregon. They are abundant west of the coastal mountain ranges and rare elsewhere in North America. Hobo spiders now occur from southern British Columbia to southern Oregon and eastward to central Montana, western Wyoming and northern Utah. They are generally rare west of the coastal mountain ranges but common and often abundant inland.

IMPACTS ON GARRY OAK AND ASSOCIATED ECOSYSTEMS

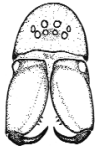
The effects of giant house and hobo spiders on Garry oak and associated ecosystems are unknown. Either can be very abundant on the undersurface of coarse woody debris, rocks and other objects on the ground, with their webs almost completely covering these areas. They likely displace native spiders, beetles, centipedes, millipedes and other species that normally would occupy these habitats. Further research is needed to understand the role of native invertebrates in Garry oak ecosystems and to determine how they are impacted by these invasive spiders.

FIELD DESCRIPTION

Both spiders are moderately large to large greyish-brown in colour, with more or less conspicuous herringbone patterning on the

TEGENARIA DUELLICA AND TEGENARIA AGRESTIS

Both giant house and hobo spiders have:

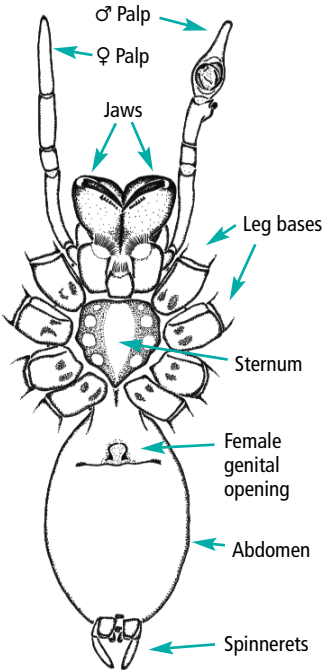


8 eyes in 2 straight to slightly downturned rows



feathery hairs (visible at 40–50x) on the legs and body

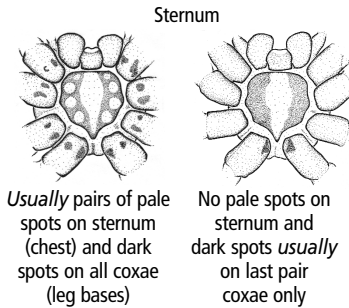
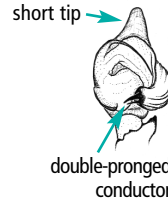
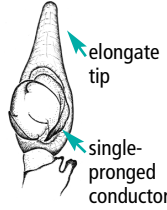
Underside of giant house spider showing both male and female features. Legs, spines and hairs omitted.



Giant House Spider (*Tegenaria duellica*)

Hobo Spider (*Tegenaria agrestis*)

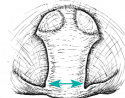
Last segment of male palp (feeler) has:



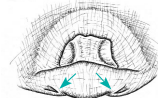
Usually pairs of pale spots on sternum (chest) and dark spots on all coxae (leg bases)

No pale spots on sternum and dark spots usually on last pair coxae only

Female genital opening is:



longer than wide; bracketed by 2 large, stout spurs



wider than long with pale margins; spurs are tiny and inconspicuous

Illustration Credit: © ROBB BENNETT

abdomen. Giant house spider adults are among the largest spiders in Canada with leg spans of 35–95 mm. Hobo spider adults have leg spans of 27–45 mm. Native species of grass spiders (*Agelenopsis* spp.), common in Garry oak ecosystems, appear similar and also build funnel-webs. However, their eyes are in strongly downcurved rows and their webs usually occur in grass and on shrubs in open areas and not usually on the underside of objects. The entrances to funnel-webs of grass spiders are normally circular; entrances to funnel-webs of giant house and hobo spider are oval (wider than high) and larger.

Spider identification can be difficult; expert consultation may be required.

LIFE HISTORY

Funnel-web spiders actively pursue and subdue insects and other prey that become entangled on the upper surface of the exposed portion of their webs. The hidden portion of the web serves as a retreat. Unlike orb-web (garden) and cob-web spiders, giant house and hobo spiders are fast, agile runners when removed from their webs.

Both species reproduce annually. Males and females mature and mate in late summer and early fall. Females remain in their webs. Newly matured males wander widely in search of the females. Egg cases are produced in the fall and early spring within the retreat portion of the web. Females can make multiple egg cases, each of which may produce over 100 spiderlings. Eggs hatch the following spring or early summer. Egg to maturity timespan is greater than 1 year. Eggs, immatures and at least some adult females overwinter. Males do not usually live past early fall.

Some native spiders prey upon wandering mature male giant house and hobo spiders. Additionally, parasitoid insects infest some egg sacs and insectivorous birds eat these spiders.

HABITAT

Throughout most of their North American ranges, giant house and hobo spiders are usually associated with humans. However, in the Georgia Lowlands, giant house and occasionally hobo spiders have moved into natural areas and may be abundant in any dry, open or moderately open habitat. Beaches, rocky shores and outcrops, Garry oak meadows and openings in wooded areas may support one or both of these species.

MANAGEMENT

Develop a long-term, realistic program for invasive species removal before undertaking any work. Before taking action, expert advice should be obtained. Please refer to the introductory section of this manual.

PHYSICAL CONTROL: Manual removal of spiders is probably the most effective means of control in small areas. Examine suitable habitats for adults, immatures and egg cases, and destroy these by squashing them or by placing them into 75% ethyl or isopropyl alcohol; placing them in alcohol allows for later identification by experts, if necessary. Webbing

should also be removed. Remove indoor spiders by vacuuming or by using roach or small rodent sticky traps placed against walls in rooms where spiders have been seen.

BIOLOGICAL CONTROL: Parasitism and predation by native insects, spiders and birds will not likely have a large effect upon established populations of giant house and hobo spiders, but providing and maintaining habitat for native parasites and predators will help control the invasive spiders.

CHEMICAL CONTROL: Chemical control of these spiders is not recommended in natural settings. Effective spider pesticides are non-selective and will harm native species. Pesticides will not affect the eggs of giant house and hobo spiders because the eggs are wrapped in thick layers of silk.

PREVENTATIVE MEASURES: Giant house and hobo spiders are highly mobile and are easily moved about inadvertently. Inspect all material for spiders and egg cases before moving it into Garry oak or other natural ecosystems.

PERSISTENCE: Giant house and hobo spiders have high reproductive rates and easily move to new locations. Once established, both species have shown the ability to increase their populations and dominate habitat.

GENERAL COMMENTS

Hobo spider bites are considered by some to cause medically significant wounds in humans although there is no good evidence to support this assumption. Giant house and hobo spiders are neither aggressive nor likely to bite humans.

REFERENCES

Vetter, R. and A. Antonelli, 2002. "How to Identify (or Misidentify) the Hobo Spider." Washington State University, Puyallup, WA. pep.wsu.edu/pdf/PLS116_1.pdf

Vetter, R.S., A.H. Roe, R.G. Bennett, C.R. Baird, L.A. Royce, W.T. Lanier, A.L. Antonelli and P.E. Cushing, *In press* (2003). "Distribution of the Medically-Implicated Hobo Spider (Araneae: Agelenidae) and a Benign Congener, *Tegenaria duellica*, in the United States and Canada." *Journal of Medical Entomology*.

For more information contact the Garry Oak Ecosystems Recovery Team, or see the website at www.goert.ca