#	Insect Group	Common Name	Cool Facts	Search Tips	Scientific names
1	Coleoptera Beetles	Red Milkweed Beetles	Wonderful red and black beetle with long dark antennae. This beetle is really bad tasting from eating milkweed. The bright red color is a warning that it is poisonous to eat. But, you can handle them. They make squeaking noises when handled. When surprised a red milkweed beetle may roll over on its back playing dead, then wake up later and off it goes!	You need to find milkweed plants, which have a bad-tasting milk colored sap. Most butterfly gardens at a nature center or botanical garden will include milkweed plants. Milkweed also grows wild in weedy fields or better yet, you can plant it around your home.	Tetraopes sp. Asclepias syriaca
2	Coleoptera Beetles	Eyed Elater	They have huge fake eye spots on the back of their thorax that are meant to scare predators away by making them look too big to eat. They are slow moving so you can easily catch them in your hands. You have not really experienced this member of the click beetle family until you see and hear it click. Catch one of these and put it on its back. This click beetle while making a loud click, flips straight up into the air and land on its feet! Too cool.	These and other click beetles will come to your black light sheet. Also, look near freshly cut or pruned oak logs. You may see them resting on sides of trees. Watch one fly. They move slowly through the air tilted somewhat vertical, rather than horizontal.	Elateridae, Alaus oculatus, wire worms, click beetle,
3	Coleoptera Beetles	American Carrion Beetle	If you come across a dead animal that is well on its way to being rotten, you will find these carrion beetles on or under the animal. Flip the corpse over with a stick. These beetles not only eat the flesh, they will eat the fly maggots that are also eating the flesh. Pinch your nose and watch them for a few minutes. If you can stand the smell you may well be on your way to becoming a forensic scientist, a person who uses bugs to solve crimes.  Pretty nifty-looking for something that eats dead things.  Unmistakable yellow plate with black dot.	You will need a coffee can or small bucket, a shovel, and a heavy brick, tile or stone large enough to cover the opening of your container. Dig a hole and bury your container. Put a piece of chicken liver (best) or other meat in the container. Cover all but an inch of the container. After one day visit every 12 hours until you have attracted a carrion beetle. Never fails!	Necrophila americana, Oiceoptoma noveboracense Nicrophorus marginatus, Burying Beetle
4	Coleoptera Beetles	Green June Bug	A large scarab beetle with a green top and gold sides. Look for them eating grapes and other thin skinned fruits, its favorite food. Populations fluctuate year to year, but this large pretty beetle can be found from June until September.  Don't forget to look for the tiny horn on its head used to puncture the skin of fruit.	They will come to porch lights and your black light sheet. They are also attracted to rubbing alcohol (isopropanol) placed in a blue container about five feet off the ground.	Cotinus nitida, Fig beetle, Scarab beetle, clypeal horn,
5	Coleoptera Beetles	Grapevine Beetle -	Just a big old scarab beetle with four spots on each side. A lot cooler than a ladybug beetle. These are in the Scarab family of beetles so look closely for the cool feather like fans on the ends of their antennas	They can be found during day light on grape vines, but if you set up your black light sheet at night, you should have a few come to visit.	Pelidnota punctate, Scarab beetle, Shining leaf chafers, lamellate antenna
6	Coleoptera Beetles	Tiger Beetle	When you finally find one and see their long jaws and big eyes you will know why they are called tiger beetles. They are as ferocious as a tiger. Some are metallic purple, black, red or green. Others are gray or white. Many have spots. They run so fast on the ground they can catch, snatch and eat just about any insect or spider they find.	Tiger beetles will come to your black light sheet, but the fun is in you getting to see them during the day on sandy soils and beaches or places with bare soil and just patches of grass. Look for an insect that runs in spurt-stop-spurt-stop pattern. Also, look for the larvae in vertical holes in the ground. You're really good if you can find the larvae's holes!	Cicindelinae

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7	Coleoptera Beetles	Whirligig Beetle	When you see these little bugs try to figure out where they are going, because they do not see to know. They're the bumper cars of the insect world! If you have a net and can catch a few, guess what fruit they smell like.	Lakes and quiet pools in rivers and creeks are the places you should look for them.	Gyrinidae, epineuston
8	Coleoptera Beetles	Dogbane Leaf Beetle	When you finally find this beetle it will probably be sitting out in the open showing no fear. Named after the plant it eats, the poisons in the leaves of Dogbane make this insect also poisonous to eat. When you see an almost metal looking beetle with colors of copper, gold, green, and blue, you may have found the Dogbane Leaf Beetle. If you are lucky you can watch this beetle while eating doing its famous back-step dance move to free itself from the sticky white sap.	Look in wet areas in fields and roadsides where the Dogbane plant grows. This beetle may also be seen on milkweed plants.	Chrysochus auratus Apocynum cannabinum
9	Coleoptera Beetles	Stag Beetle	When looking for bugs around rotten logs, keep your eyes open for several types of stag beetles. With some luck you will see a male elephant stag beetle with its really long horns.	These beetles may come to your black light sheet if you are near woods with lots of rotted logs. Otherwise look carefully on fallen logs.	Lucanus capreolus Lucanidae Pinching bugs, Elephant stag beetle
10	Coleoptera Beetles	Tortoise Beetle	The fun types of Tortoise Beetles to find are the ones that have a see-through shell, but many of these are metallic looking with reds, blue, orange and green colors. These beetles have strong legs and can pull themselves tight against the leaf they are on. The golden tortoise beetle will change colors if you give it a poke.	If you can find morning glory or bindweed plants, you easily find these round metallic shaped beetles. They also feed on sweet potato vines, so look in vegetable gardens with sweet potatoes growing.	Convolvulaceae Cassidini Gold bugs
11	Coleoptera Beetles	Caterpillar Hunter	These beetles are beautiful predators with metallic green abdomen and a steel-blue head and thorax. Other Caterpillar Hunters are black. If threatened, they can release a strong smell and can bite.	Caterpillar hunters are usually seen scurrying across the ground searching for caterpillars. Look for them on tree trunks and in gardens. They will come to your black light sheet and may eat other insects on your sheet	Carabidae, Calosoma scrutator
12	Coleoptera Beetles	Soldier Beetle	These long slender beetles are often mistaken for Fireflies. Look for beetles that are long with all three body parts the same width, colored black and orange.	Put this beetle on your list when you are out during the summer and fall in weedy fields looking for bugs on flowering plants such as asters and goldenrod.	Cantharidae, Chauliognathus leatherwing
13	Coleoptera Beetles	Swamp Milkweed Leaf Beetle	Another of the red and black bugs that use these colors to warn birds and other animals not to eat them. The larvae can be found with the adults and look hump-backed. Adults and larva cut the side veins of milkweed leaves before feeding, to reduce flow of the sticky latex.	Another insect that feeds on the bitter sap of milkweed, so it will also taste bad to predators. Where might you go to look for Swamp Milkweed Leaf Beetles?	Labidomera clivicollis
14	Coleoptera Beetles	Dung Beetle	When you set out to find dung beetles you first need to find cow, pig or horse manure. Dung beetles eat manure and use it to lay eggs in. You are really observant if you find one of the roller dung beetles, rolling a ball of manure to a nest site.	Look under manure in an organic farmer's field. Look for patties with lots of pencil-size or larger holes. Use a shovel to quickly scoop up the paddy and an inch of soil underneath the paddy. Poop traps can also be made to attract the beetles by collecting very fresh cow, hog or horse manure and placing it on bare ground out in the open, or on a screen (one-inch chicken wire) over a pit fall trap.	Scarabaeinae, Aphodiinae, Phanaeus vindex, Scarab beetles, rollers, tunnelers, dwellers,

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15	Coleoptera Beetles	Locust Borer	Out on your weedy field adventure looking at yellow flowers you will see what looks a little like a hornet. The W-shaped marking lets you know that you have found a beetle that mimics hornets. Its long antennae are typical of many species of beetles in the Long-Horned Beetle family.	These are beetles to have on your to-find list when you go to weedy fields in the summer and early fall. You will find them on goldenrod flowers. They may come to your black light sheet.	Cerambycidae, Megacyllene robiniae
16	Coleoptera Beetles	Forked Fungus Beetle	After learning to identify shelf fungi (Ganoderma tsugae, G. applanatum, and G. lucidum) you are ready to find these small crazy looking brown bumpy beetles with two horns. They only live on shelf fungi. Find the shelf fungi and you may have found them.	Find Ganoderma sp. shelf fungi on standing dead trees. Look on the underside of the shelf for these beetles as they rest. They are active at night, so return with a flashlight to look some more if you cannot find them during the day.	Tenebrionidae, Bolitotherus cornutus
17	Caddisfly	Caddisfly	When you see a small to medium sized insect holding its wings like a tent over its body and long antennae, you may be looking at a caddisfly. Very common for a few weeks after they leave the water.	Caddisflies will come to your black light sheet and can be very common once they hatch out. Seeing a Zebra Caddisfly is a special treat.	Tricoptera Macrosternum zebratum
18	Diptera	Hoverfly	Could easily be called the helicopter fly as they fly up, down, forward, backyards and stay in one place just as well as any helicopter. When you see a bee-like bug hovering in one spot you probably have found your hover fly. Listen for a loud bee-like Buzzzz. These flies not only look like bees, they sound like one too! Bees, wasps and hornets have longer antennae. Hoverflies have two short thick nubs for antennae.	While hard at work on your Bucket list, try wearing a red shirt on your field trips—Hover flies may hover in front of you attracted to red color which is common color of flowers. Always be listening for a bee-like Bzzzzz made by this fly.	Syrphidae, Milesia virginiensis, M. scutellate Flower flies, bee mimic, larvae, pollination,
19	Diptera	Crane Fly	Some people who have seen a Crane Fly run to the phone to call the health department about monstrous mosquitoes invading their yard. But you know better! In fact, Crane Flies are harmless bugs that don't eat anything as adults. They can't bite at all. Look for them in grassy areas in the summer.	Found resting in grassy areas, they will come to your black light sheet. You may find them in the morning resting under porch lights.	<i>Tipulidae,</i> Mosquito hawks,
20	Diptera	Phantom Crane Fly	Phantom Crane Flies are all-around the most beautiful and elegant insect in North America. Adults fly with their legs spread out like a clock face. Their clear wings, thin legs and body, black and white coloration, and the slow hypnotic floating flight make this species appear and disappear as it flies though sunlight and shade over a stream.	You will want to head to shaded woodland streams in the late spring to early fall on sunny days.	Bittacomorpha clavipes, Ptychopteridae
21	Diptera	Robber Fly	These large slender hairy flies choose a hunting perch and then fly out to catch other insects. Some are over an inch long! After catching an insect they return to their perch or another shady location. If you are lucky enough to find one sucking juices out of its prey you may be able to watch it hang by one leg, or rotate its legs over its back to perch. They have two large bulging eyes with a big space between them.	Look for these long-legged hairy flies perched vertically on grasses and branches in open areas.	Asilidae, Diogmites, assassin flies, hanging thief
22	Diptera	Tiger Bee Fly	Tiger Bee Flies are found near wood structures like decks, wherever you find Carpenter Bees That is because they parasitize carpenter bees who also hang around wood. Shaped a bit like a stealth bomber, their wings are longer than their bodies. This fly is triangle shaped.	Look for these where there are carpenter bees. You may just see one while searching for carpenter bees.	Xenox tigrinus, Bombyliidae,

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30	Hemiptera	Phymata Ambush Bug	You are looking for a strange bug that looks like something right out of a science fiction movie. Hiding in flowers they pounce on their prey. Their ridges and bumps, and enlarged front legs make them hard to see. Do not handle these as their bite is painful. Note the diamond shape pattern at the end of the body, found on most true-bugs (Hemiptera).	Look closely at yellow and white flowers in weedy fields in late summer and early fall. They are so well camouflaged that your first sighting may be due to seeing a dead insect stuck on the flower. Look closer and you will see the camouflaged Ambush bug holding that insect and eating it.	Reduviidae Phymatinae Assassin bug
31	Hemiptera	Water Scorpion	Found in still water with vegetation in ponds, lakes and rivers. These bugs look like a mix between a walking stick and a praying mantis. Look for a stick like bug with long front legs and a tube that looks like a stinger on the other end. That tube is a "snorkel" used for breathing, not for stinging.	Look in shallow water in ponds, lakes and rivers around vegetation and algae. You may find a dip net useful if you want to hold one.	Nepidae Ranatra sp.
32	Hemiptera	Leaf Footed Bug	Loud, smelly bugs with large fans on their back legs. Like most true bugs they have a sucking mouth part which you will see them stick into plants. Vegetables with little spots on them may well have been poked by Leaf Footed Bugs.	These bugs feed on plant juices. Ask a neighbor to let you look for them in their vegetable garden.	Coreidae Leptoglossus sp.
33	Hemiptera	Giant Water Bug,	These large true bugs have large front legs. They swim and fly and can be seen far from water. The small tube on their rear is used underwater, poking above the surface to breathe, but it is not a stinger. They do bite. They are a popular food in Asia.	Look for these large bugs around weedy or muddy pond/lake edges. They will come to your black light sheet and can be found at night around swimming pools. In a weedy pond, put a waterproof flashlight in the water and these bugs will gather around the light.	Belostomatidae Lethocerus americanus Toe-biters
34	Hemiptera	Mealybugs tended by ants	Mealybugs are common in many places. A white crust on limbs of bushes and many other plants is the sugary waste they excrete onto their backs.	Keep an eye out for a white crust on branches and stems of plants. The mealybugs squirt this sugary crust onto their backs. Ants protect the mealybugs and eat the sugary crust.	Pseudococcidae
35	Hymenopt era	Eastern Carpenter Bee	You will need to learn the difference between carpenter bees and bumble bees. The easiest way to tell them apart is that the carpenter bee has a shiny black abdomen. Bumblebees have hairs and some yellow on their abdomen. Carpenter bees are usually seen around wooden homes and decks. Look for carpenter bees with a large white spot on their head. These are the males and they do not sting. Be brave and try handling these white-spotted bees with your hands.	Look around homes made of wood or around wooden desks. You may see a small pile of sawdust under deck railing. Right above it will be a hole that a carpenter bee has made. One of the easiest insects to catch while it is flying with your insect net.	Xylocopa virginica
36	Hymenopt era	Velvet Ant	That beautiful bright red hairy body is a warning that this bug can deliver a painful sting. Do not handle them, but they will not attack you. So enjoy watching them go about their business. While we call them velvet ants, scientists tell us they are wasps.	You will easily see these bright red bugs crawling around on the ground on warm days. Most are found by accident!	<i>Mutillidae,</i> <i>Dasymutilla sp.</i> Cow killer
37	Hymenopt era	Giant Ichneumon Wasp	If you include the long tail that looks like a stinger but isn't, these wasps can be up to 10 inches long. The tube that is much longer than the body of these wasps is an ovipositor for laying eggs. Many wasps do not have stingers. There is no cooler looking wasp.	You may be lucky and have one of these come to your black light sheet. Otherwise look for them on standing rotting tree trunks where they are laying eggs on the larvae of the pigeon tremex wasp.	Megarhyrssa macrurus. Tremex Columba, Stump stabber

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38	Hymenopt era	Cicada Killer	A large wasp sometimes confused with European Hornets. They sting Cicadas to paralyze them. To get the Cicadas back to the wasp's nest, you may get to watch them lug the Cicada up a tree trunk, brick wall or post. They then fly off with the Cicada to their nest, barely able to stay up in the air. Their stinger is rarely used for protection, only to paralyze the Cicadas that their larvae feed, back at their burrow.	When the Cicadas start buzzing up in the trees, the Cicada Killers will be out looking to kill them. By accident, you may see one of these right after they have caught a Cicada. The other way to see them is to look for their nests in the ground in open sunny areas. Around bare soil look for half-inch holes with a mound of dirt around them.	Crabronidae Sphecius speciosus Sand hornets
39	Hymenopt era	Mud Dauber -	Usually dark colored wasps with slender waists. They all make mud nests on the sides of structures, but different species make different styles of nests. The Black and Yellow Mud Dauber has uniquely yellow banded legs. The Organ Pipe Mud Dauber is black with yellow tipped black legs. It builds a more ornamental looking nest with ridged piping. A single nest will have different shades of brown due to the wasps collecting mud from different locations. Break a nest open and you will find many paralyzed spiders.	You might see a Mud Dauber making a ball of mud at the edge of a mud puddle. Otherwise look for their nests on porches, in car ports or on the sides of cliffs. Wait around to see them arrive at the nest with either a spider or a ball of mud in their front legs.	Sphecidae Crabronidae, Chalybion californicum, Sceliphron caementarium Trypoxylon politum
40	Hymenopt era	Potter Wasp	Look for medium sized wasps with yellow or white stripes. The fun is in finding their nests which look like little clay pots with an opening with a lip. If the pot is sealed, there will be a caterpillar inside that the wasp has laid an egg on.	Look for the Potter Wasps on flowers. Their nests are found on everything from thick grass stems to window screens.  Cute little pots!	Vespidae Eumenes, sp. Mason wasps
41	Hymenopt era	Wool Sower Gall	These decorative white and pink-red-brown balls are found on oak trees. A small wasp lays her egg along with a chemical that makes the oak tree grow this fuzzy ball around the wasp's egg.	When looking for other bugs keep your eyes open for these galls on White Oak trees.	Callirhytis seminator Oak seed gall
42	Lepidopter a	Hummingbird moth or Snowberry Clearwing	This is a moth that looks like a bumblebee but feeds on flowers by hovering like a hummingbird. Look for clear wings and long straight antennae.	You will see them in the summer months feeding on any flowers that bumblebees would use. Look for a "bumblebee" that hovers in front of a flower instead of landing on it.	Hemaris spp.
43	Lepidopter a	Puddle Party	Occasionally a large number of butterflies collect in one place and may fly up when you approach. This visible "puddle" attracting the butterflies is either water or urine. The butterflies are getting vitamins and moisture from the puddle.	You will walk up on puddle parties while being outdoors. You can also make a fake puddle by filling a large plate or pan with sand, mix in a little dung or rich soil and pour water in the pan. Leave it out in an open area.	Mud puddle gang
44	Mantidae	Praying Mantis	They look like they're praying until they lunge at an insect (or small vertebrate) with their raptorial legs. They then eat the bug alive! You can hear the munching sound. One of the few insects that can turn its head and even look over its shoulder. Good pets!	The large Chinese Praying Mantis is common and found in gardens, yards and around flowers. Their egg cases are easily found and will hatch out a couple of hundred young ones.	<i>Mantidae</i> Chinese Praying Mantis
45	Mecoptera	Common Scorpionfly	Oddly shaped and boldly colored with a tail that will remind you of a scorpion. Plus a long thick jaw called a rostrum. These bugs have quite the big long thick jaw!	Look for them in early summer in weedy areas near forest edges. Spotted wings, a long jaw and that scorpion like tail are the key patterns. You may occasionally catch one with your sweep net.	Panorpidae Parnorpa sp.

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46	Megalopte ra	Dobsonfly	You will know when you are looking at a Dobsonfly. They are four inches in length with large jaws and wings that lay flat. The males have sword-like jaws almost as long as their bodies, but cannot bite. The smaller jaws of the females can deliver a nip.  Real giants!	These are uncommon but worth the effort. They will come to your black light sheet or you may find them on rocks or trees right next to a stream with clean unpolluted water. Their larvae, the hellgrammite, may be found by turning over rocks in clean running cold water streams.	Corydalidae Corydalus cornutus Hellgramite
47	Neuropter a	Antlion	Easily found as larvae in dry areas with fine-grained sandy soil. Can be found throughout the summer and into the fall.  An antlion larva will bury itself at the bottom of its pit and wait for a small invertebrate to stumble inside. It will then flick grains of sand at its prey so that it tumbles all the way to the bottom, where the antlion grabs it with its mandibles and has a meal. The larva is a hideous creature but changes into an adorably cute damselfly-like adult insect.	You will find these in any covered area where there is dry loose dirt or sand. Look under porches and overhanging cliffs. When you see a cone shaped hole in the ground, use a large spoon or even your hand to scoop up the larvae of the ant lion. The adults come to lights and look quite cute, like a damselfly with knobs at the end of their antennae.	<i>Myrmeleontidae</i> Doodlebugs
48	Neuropter a	Green lacewings	These small fragile insects have beautiful wings and golden colored eyes. If you carefully hold it by its wings is will feel threatened and release a scent that smells like mothballs. Adults are delicate and beautiful. Some species of lacewing larvae stick debris on their backs as a disguise. If you see a fast-moving aphid it may actually be a lacewing larva disguised to sneak up on and eat aphids.	You will find lots of these lacewings as you look around for other insects. They will also come to your black light sheet.	C <i>hrysopidae</i> Chrysoperla carnea Stink flies
49	Neuropter a	Green Mantidfly	Looks like a cross between a praying mantis and a lacewing — what else looks this cool?!? Watching one move around and use its front legs to grab at food is fascinating. They're just plain cool to look at, especially with a magnifying glass.	They are hard to find outside but they may come to your black light sheets	Zeugomantispa minuta
50	Odonata	Common Green Darner	You will see them patrolling like helicopters overhead just about anywhere, even at a traffic light. They have a green thorax and a blue abdomen but it may turn darker when it is cold to absorb the heat of the sun. Like all dragonflies, they hold their wings out to their sides.	Look around sunny weedy lakes and ponds, you may see them in fields. They can be found in the mornings covered in dew on a perch. You may be the rare person who sees a swarm of thousands of them migrating in the Fall.	Anax junius, Aeshnidae
51	Odonata	Ebony Jewelwing Damselfly	When you see these along a woodland stream, you will realize that their beauty cannot be described in words. Males are an irridescent blue-green that glistens in the sun with ebony wings. The female Ebony Jewelwing has a white dot on the end of her wings. No other damselfly has dark black wings. The color of this large damselfly shifts from gold to green to blue to purple to black depending on the angle that sunlight hits the insect's body. Like all damselflies, the Ebony Jewelwing holds its wings straight up above its body.	When you are in a wooded area with creeks or rivers is the time to look for these damselflies. They often perch in sunny spots in the woods near water.	Calopteryx maculate Calopterygidae, black winged damselfly
52	Odonata	Halloween Pennant Dragonfly	You guessed it, they are orange and black. Easy to identify because of the orange and black bands on the wings.  Spooky, but don't wait till Halloween to go looking for	After arriving at your favorite lake or pond, look for these dragonflies resting on plants in and at the edge of the water.	Celithemis eponina Libellulidae, Skimmers,