THE TROUT ANGLER'S
INSECT FIELD GUIDE

Visual Identification · Size · Life Cycles · Geographic Range

A consolidated reference for fly fishing — North America

Mayfly adult (Ephemeroptera) *Upright sail-like wings held together, 2–3 long tails, slender upturned body.*

Caddisfly adult (Trichoptera) *Moth-like, tent-shaped wings over the body, no tails, long antennae.*

Stonefly adult (Plecoptera) *flat wings folded over the back, two short tails, long antennae; often large*

Midge adult (Diptera: Chironomidae) *tiny, mosquito-like, delta wings flat over body, feathery antennae*

How to Use This Guide

Trout feed on a relatively small number of insect groups, and about 90% of a trout's diet is taken below the surface. This guide is organized around the four aquatic orders that matter most — mayflies, caddisflies, stoneflies, and midges — plus the terrestrials that fall in during summer. For each group you'll find how to recognize it, how big it is (both in millimeters and in the hook size you'd tie to imitate it), how its life cycle works with a diagram of each stage, where it lives across North America, and practical notes on fishing it.

The golden rule: match size and silhouette first, color second. A trout keyed on a size 18 olive mayfly will refuse a size 12, but will often accept a rough imitation of the right size and shape. Get the size and stage right and you are most of the way there.

The four questions to answer streamside

- **Order —** What order is it? Wing posture and tails give it away instantly (see the ID cues in each section).
- **Size —** How big is it? Hold it against a hook or ruler; convert to a hook size using the chart below.
- **Stage —** What stage are the trout eating — nymph/larva, emerger/pupa, or adult? This decides how you fish, not just what you tie on.
- **Numbers —** Is it actually on the water in numbers? One bug is not a hatch. Look for repeated, rhythmic rises.

Fast field ID — the four aquatic orders at a glance

Order	Wings at rest	Tails	Antennae	Tell-tale
Mayfly	Upright, together like a sail	2–3 long	Tiny	Sailboat on the water
Caddisfly	Tent / roof over body	None	Long	Moth-like, erratic flight
Stonefly	Flat, folded over back	2 short	Long	Big; clumsy flier; on rocks
Midge	Flat, delta over body	None	Feathery (males)	Tiny; mosquito-like, no bite

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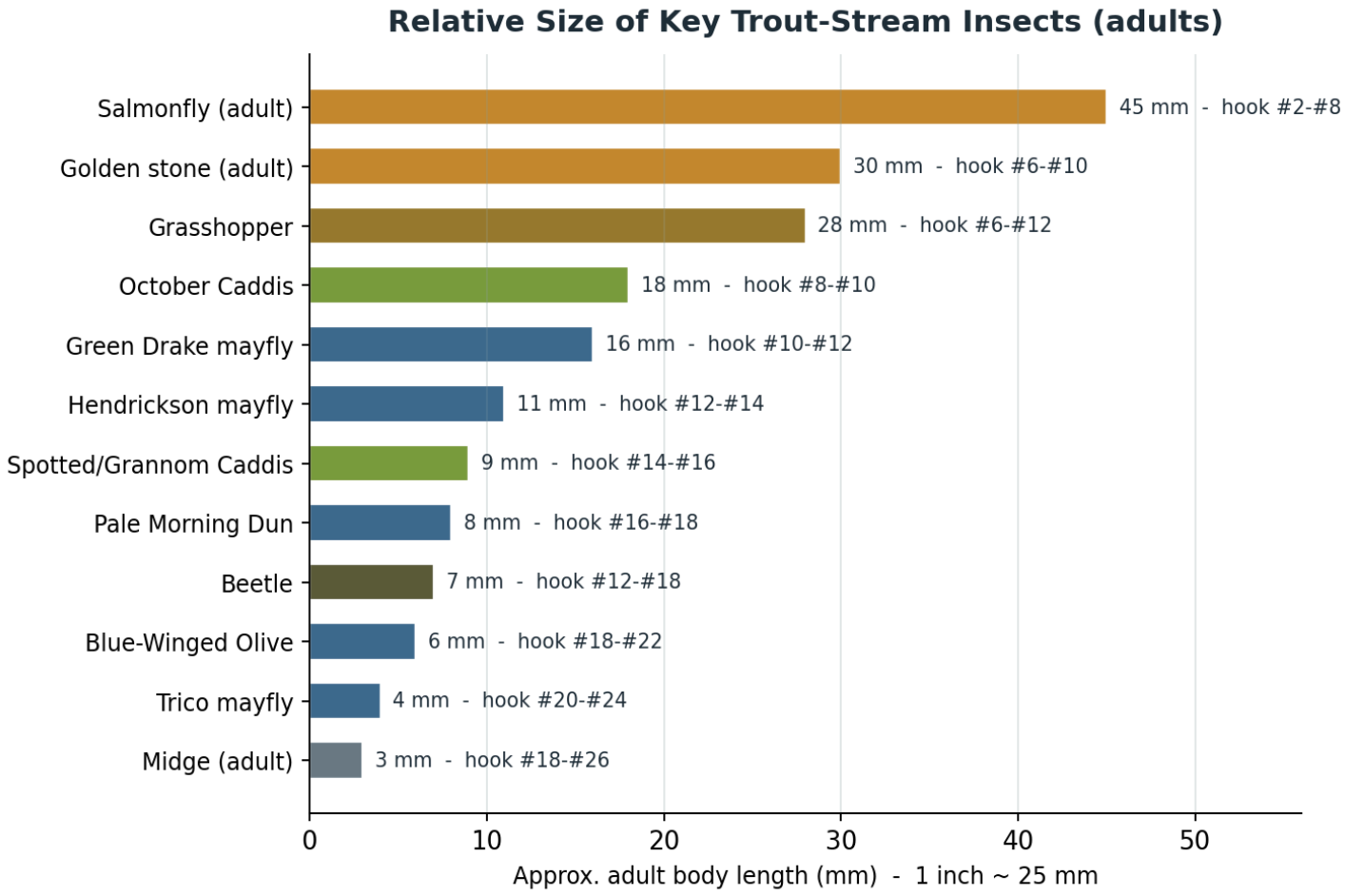
Reading Size: Millimeters and Hook Numbers

Fly hooks are numbered inversely to size — the bigger the number, the smaller the hook. This is the single most useful conversion in fly fishing, because catalogs, fly bins, and hatch charts all speak in hook sizes. Use this table to translate a real insect's body length into the hook you'd fish.

Hook size	Approx. body length	Feels like	Typical insects
#2–#6	20–45 mm (¾–1¾ in)	Big meaty bug	Salmonfly, large golden stone, big hoppers
#8–#10	14–20 mm (½–¾ in)	Large	Golden stone, October caddis, green/brown drake
#12–#14	9–13 mm (⅜–½ in)	Medium	Hendrickson, March brown, larger caddis, hoppers
#16–#18	6–9 mm (¼–⅜ in)	Small	Pale morning dun, most caddis, beetles, ants
#20–#22	4–6 mm	Tiny	Blue-winged olive, small caddis
#24–#28	2–4 mm	Speck	Trico, midges



Master Hatch Calendar (North America)

Timing shifts with water temperature. Insects hatch on degrees, not dates: Treat the months below as a regional average, and use the water-temperature column — the reading that matters more than the calendar — to judge when a hatch is actually about to fire.

Insect	Peak season	Water temp trigger	Time of day	Hook	Where it's strongest
Midges	Year-round (key Nov–Mar)	34°F+ (any open water)	Midday in winter	#18–#26	Everywhere; tailwaters
Blue-Winged Olive	Mar–May & Sep–Nov	45–55°F	Overcast middays	#18–#22	Continent-wide
March Brown	Mar–Apr (E) / May (W)	44–50°F	Early afternoon	#12–#14	East & West freestones
Skwala stonefly	Late Feb–Apr	44–48°F	Afternoon	#8–#12	Northern Rockies, West
Hendrickson	Mid-Apr–mid-May	46–52°F	Afternoon	#12–#14	Eastern & Midwest streams
Salmonfly	Jun–early Jul	54–58°F	Late day / morning	#2–#8	Western freestones
Golden stonefly	Jun–Aug	55–60°F	Evening	#6–#12	Western rivers
Pale Morning Dun	Jun–Aug	54–60°F	Mid-morning	#16–#18	West; spring creeks
Green Drake	Jun–Jul	~50–55°F	Afternoon/evening	#10–#12	West & Northeast
Caddis (various)	Apr–Oct	50–55°F	Evening	#12–#18	Continent-wide
Trico	Jul–Oct	55°F+ (warm a.m.)	Early morning	#20–#24	Spring creeks, tailwaters
Callibaetis	Jun–Sep	~60–65°F	Late morning	#14–#16	Stillwaters, slow flows
Terrestrials	Jul–Sep	Warm air 70°F+ (not water)	Warm afternoons	#8–#18	Grassy banks, meadows
October Caddis	Sep–Oct	~50–55°F (cooling)	Evening	#8–#10	Western freestones

Water-temperature triggers are approximate and vary by river and region (a "~" marks the least-documented values). Overcast skies advance many mayfly hatches; a stream thermometer is the single best tool for anticipating them.

Mayflies (Ephemeroptera)

Mayflies are the aristocrats of the trout stream and the insects most fly fishing tradition is built around. They are delicate, upright-winged insects that trout eat at every life stage. What makes them unique in the insect world is that they pass through two winged stages — the freshly emerged dun and the sexually mature spinner — a quirk that directly shapes how you fish them.

Because so many famous hatches (Hendrickson, Pale Morning Dun, Blue-Winged Olive, Trico, Green Drake) are mayflies, learning to recognize the order and gauge its size unlocks the majority of classic dry-fly fishing across the continent.

Visual Identification

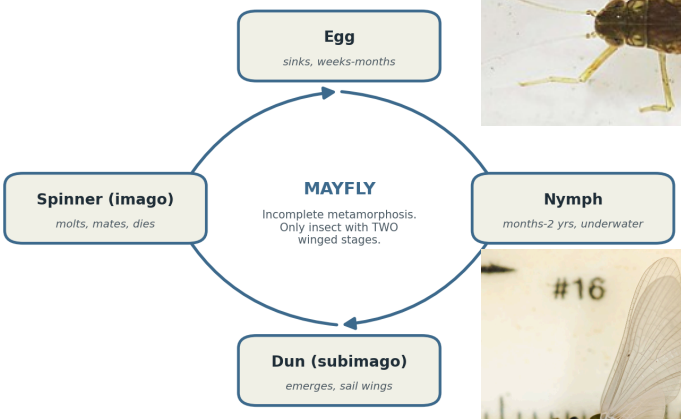
- **Wings:** held upright and together above the body like the sail of a small boat — the classic silhouette drifting downstream.
- **Tails:** two or three long, thread-like tails ("whisks"), usually longer than in any other order.
- **Body:** slender and often gently upturned; single pair of large wings with a small hind pair.
- **Nymph:** streamlined, with plate- or feather-like gills along the abdomen and (almost always) three tails.
- **Spinner vs. dun:** duns look dull and cloudy-winged; spinners are glassy-clear-winged and shinier, and gather in mating swarms above the water at dusk or dawn.

Size — Physical and Relative

Mayflies span nearly the whole hook range. The tiny Trico is a #20–#24 speck barely 4 mm long; the Blue-Winged Olive runs #18–#22 (about 6 mm); mid-sized favorites like the Hendrickson and March Brown are #12–#14 (9–13 mm); and the Green Drake is a mouthful at #10–#12, roughly 14–16 mm.

A practical field trick: mayflies almost never exceed about 20 mm of body length, so if a big upright-winged bug looks larger than your thumbnail, double-check it isn't a stonefly.

Mayfly Life Cycle



Mayfly life cycle — incomplete metamorphosis, and the only insect order with two winged adult stages (dun and spinner).

- **Egg:** females deposit eggs on or in the water; they sink and incubate for weeks to months.
- **Nymph:** the long-lived stage — months up to two years underwater. This is where trout eat the most mayflies.
- **Dun (subimago):** the nymph rises and the winged dun emerges at the surface film, drifting while its wings dry — the vulnerable moment dry-fly anglers target. Dull-cloudy upright wings.
- **Spinner (imago):** within hours to a day the dun molts one final time into the glossy spinner, mates in an aerial swarm, lays eggs, and dies spent on the water — the "spinner fall." Glassy clear wings.

Geographic Range

Mayflies are found in clean, well-oxygenated water across every region of North America, from Eastern limestone spring creeks to Western tailwaters and freestone rivers. Specific species are regional: the Hendrickson (Ephemerella subvaria) and larger Eastern drakes are hallmarks of Appalachian and Midwestern streams; the Pale Morning Dun (Ephemerella) and Western Green Drake (Drunella) define Rocky Mountain and West Coast summers; while Blue-Winged Olives (Baetis) and Tricos are near-continental and thrive in tailwaters and spring creeks everywhere.

Because many mayflies demand cool, clean water, their presence is itself a sign of good trout habitat and water quality.

Key Species to Know

Common name	Genus	Hook	Season	Region
Blue-Winged Olive	Baetis	#18–22	Spring & Fall	Continent-wide
Pale Morning Dun	Ephemerella	#16–18	Jun–Aug	West
Hendrickson	Ephemerella subvaria	#12–14	Apr–May	East / Midwest
March Brown	Maccaffertium / Rhithrogena	#12–14	Spring	East & West
Western Green Drake	Drunella	#10–12	Jun–Jul	West
Trico	Tricorythodes	#20–24	Jul–Oct	Spring creeks
Callibaetis	Callibaetis	#14–16	Jun–Sep	Stillwaters / West

Fishing Notes

- **Fish the nymph most of the time:** a Pheasant Tail or similar mayfly nymph produces year-round, since nymphs are always present and available.
- **Watch for the emerger window:** trout often key on duns stuck in the film; a soft-hackle or emerger pattern fished in the surface can outfish a high-floating dry.
- **Don't miss the spinner fall:** dusk and early-morning spinner falls bring huge numbers of spent mayflies — fish a flush-floating spinner pattern in the film.
- **Match the size before the color:** carry your mayfly imitations in a range of sizes; changing one hook size up or down solves most refusals.

Caddisflies (Trichoptera)

Caddisflies are, by sheer numbers, often the most abundant insect in a trout stream, and on many rivers they out-produce mayflies. They look moth-like and undergo complete metamorphosis (egg–larva–pupa–adult), which means the pupa — not just the adult — is a critical, often overlooked stage for the angler.

Caddis larvae are famous for building portable cases out of sand, gravel, twigs, or plant matter glued together with silk; other species spin fixed nets to strain food from the current. Recognizing those cases on streambed rocks tells you caddis are present even when nothing is hatching.

Visual Identification

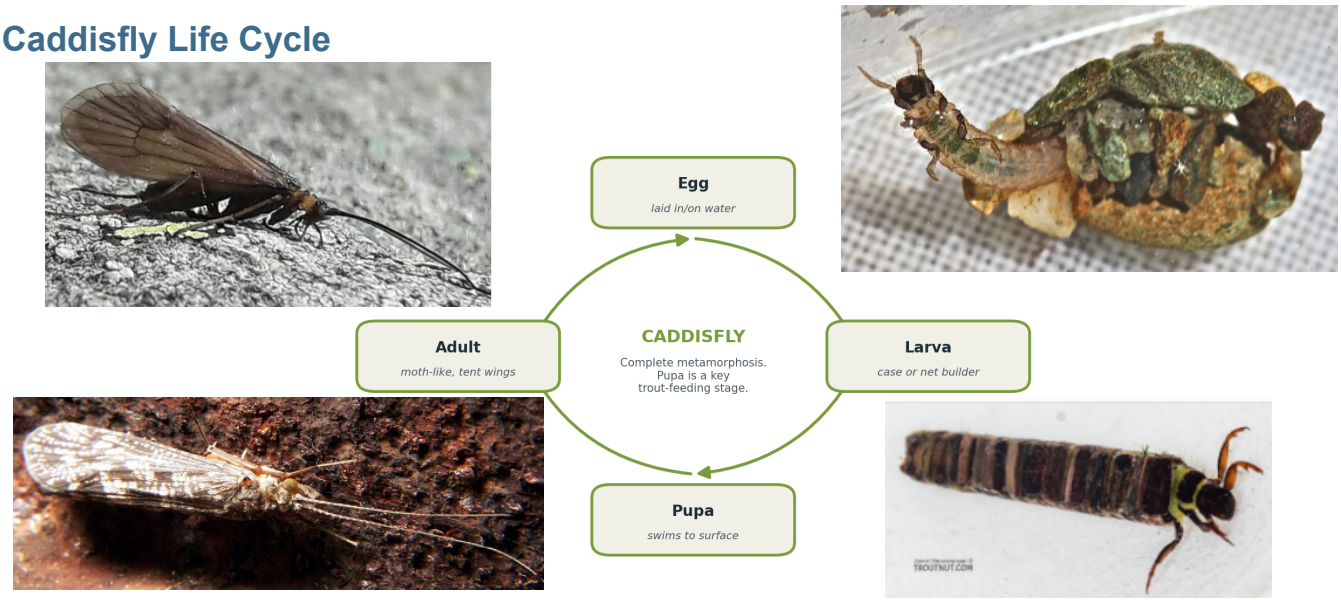
- **Wings:** held tent-like (a roof or pup-tent) over the body at rest — the fastest way to separate a caddis from an upright mayfly.
- **Overall look:** moth-like and fuzzy, with no tails and long antennae; flight is fluttery and erratic, often in evening swarms.
- **Larva:** grub- or caterpillar-like, frequently inside a case of sand, stone, or twig fragments; net-spinning species are free-living with a distinct head capsule.
- **Pupa:** a mobile, well-legged stage that swims to the surface trailing a gas bubble that gives it a sparkly sheen — imitated with soft-hackles and sparkle pupae.

Size — Physical and Relative

Most trout-stream caddis fall in the #14–#18 range (roughly 6–11 mm), with the common spotted and grannom caddis around #14–#16. The standout exception is the October Caddis of Western rivers — a burnt-orange giant at #8–#10 (up to ~18 mm) that trout target aggressively in fall.

Note a useful rule: caddis pupae and adults have bodies one to three hook sizes smaller than the mature larva, so size your dry a step or two down from the larva you find on the rocks.

Caddisfly Life Cycle



Caddisfly life cycle — complete metamorphosis. The swimming pupa is a key, and frequently neglected, feeding stage.

- **Egg:** laid in gelatinous masses on the water surface, on streamside objects, or by females crawling underwater to deposit them.
- **Larva:** the long feeding stage; case-builders drag a protective home around, net-spinners anchor silk nets in the current. Always available to trout.
- **Pupa:** after pupating in a sealed case or cocoon, the pharate adult cuts free and swims rapidly to the surface — a fast, vulnerable, heavily-eaten stage.
- **Adult:** emerges quickly, mates, and often lives days to weeks (unlike mayflies), returning repeatedly to lay eggs — which is why evening egg-laying flights trigger explosive rises. Tent-shaped wings.

Geographic Range

Caddisflies occur across all of North America and tolerate a wider range of water conditions than mayflies, including slightly warmer and less pristine streams, which makes them the backbone of many rivers. Net-spinning caddis (like the ubiquitous Hydropsyche) dominate riffled freestone rivers everywhere; the Mother's Day Caddis (Brachycentrus / grannom) blankets Western and Midwestern rivers in spring; and the October Caddis (Dicosmoecus) is a signature Western fall hatch from the Rockies to the Pacific Northwest.

Key Species to Know

Common name	Genus	Hook	Season	Region
Spotted / Net-spinner	Hydropsyche	#14–16	May–Sep	Continent-wide
Grannom / Mother's Day	Brachycentrus	#14–16	Apr–May	West / Midwest
Little Black / Micro caddis	various	#18–20	Summer	Continent-wide
October Caddis	Dicosmoecus	#8–10	Sep–Oct	West

Fishing Notes

- **Fish the pupa on the swing:** a soft-hackle or sparkle pupa swung up toward the surface imitates the rising pupa and draws savage takes during a hatch.
- **Expect splashy rises:** unlike the sipping rises to mayflies, caddis-feeding trout often slash and jump because the adults move fast — a twitched or skated dry can trigger strikes.
- **Prime time is evening:** egg-laying flights concentrate at dusk; be on the water late.
- **Read the rocks:** turn over a few streambed stones — cases and nets confirm caddis and hint at size before you ever see an adult.

Stoneflies (Plecoptera)

Stoneflies include the largest insects a trout will eat, and a good stonefly hatch is the closest thing in fly fishing to a feeding frenzy — a size 4 salmonfly is the biggest meal of the year and pulls the largest trout to the surface. They demand cold, clean, highly-oxygenated, rocky water, so their presence is a strong indicator of a healthy river.

The defining behavioral quirk: stoneflies do not emerge in open water. The nymphs crawl to the bank and climb out onto rocks, logs, and bridge pilings to molt into adults. That means the best subsurface fishing is a nymph drifted near shore, and the adult action happens along the banks.

Visual Identification

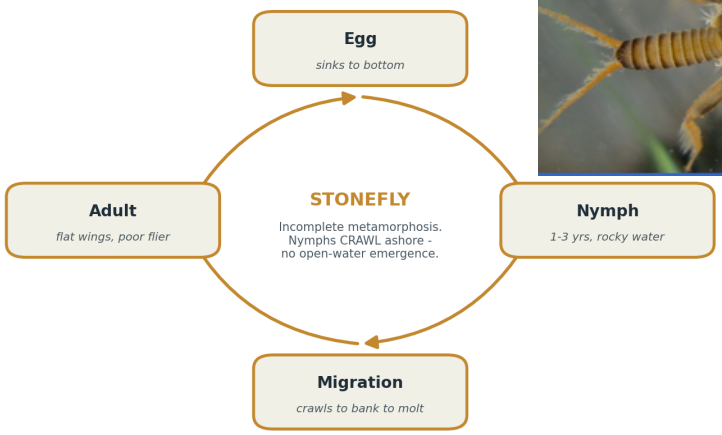
- **Wings:** held flat and folded flat over the back at rest (not tented, not upright) — often extending past the abdomen.
- **Body & tails:** robust body with two short tails and two long antennae; adults are clumsy, heavy fliers.
- **Nymph:** flattened, with two tails, two prominent antennae, and stout legs built for gripping rocks; gills are tufted at the leg bases, not along the abdomen (unlike mayfly nymphs).
- **Cast skins:** look for split, empty nymphal shucks left clinging to streamside rocks — a sure sign a hatch is underway.

Size — Physical and Relative

Stoneflies run large. The salmonfly (Pteronarcys) is the giant — adults reach up to ~45 mm (nearly 2–3 inches with the wings) and are fished on #2–#8 hooks. Golden stones are #6–#12 (roughly one to two inches). The spring-hatching Skwala is more modest at #8–#12. Small winter and yellow/lime stones ("yellow sallies") drop to #14–#16.

If you find an upright-or-flat-winged bug clearly bigger than any mayfly, it is almost certainly a stonefly — nothing else on the trout stream gets that large.

Stonefly Life Cycle



Stonefly life cycle — incomplete metamorphosis. Nymphs crawl ashore to emerge, so fish nymphs near the bank and adults along the edges.

- **Egg:** females drop or wash eggs onto the water; they sink to the rocky bottom.
- **Nymph:** long-lived — one to three years — clinging to clean, cold, rocky riffles. Available to trout every day of the year. 2 tails. Stout legs for gripping rocks.
- **Migration & emergence:** mature nymphs crawl to shore and climb out onto rocks and vegetation to molt — there is no open-water emergence to imitate.
- **Adult:** flat-winged, clumsy adults live along the banks for days, mate, and the females return to the water to lay eggs, often fluttering and crashing on the surface. Flat wings folded on back. 2 short tails.

Geographic Range

Stoneflies are strongly associated with the cold, tumbling freestone rivers of the West — the salmonfly and golden stone hatches of Montana, Idaho, Wyoming, Colorado, and Oregon are legendary early-summer events that anglers travel for. Skwalas are a Northern Rockies and Pacific Northwest spring specialty. Smaller stoneflies (winter stones, yellow sallies) are widespread across both Eastern and Western clean-water streams, but the giant-stonefly spectacle is fundamentally a Western freestone phenomenon.

Their intolerance of pollution and warm water makes stoneflies one of the best living indicators of pristine river conditions.

Key Species to Know

Common name	Genus	Hook	Season	Region
Salmonfly (giant)	Pteronarcys	#2–8	Jun–early Jul	Western freestones
Golden stone	Hesperoperla / Calineuria	#6–12	Jun–Aug	West
Skwala	Skwala	#8–12	Feb–Apr	N. Rockies / PNW
Yellow Sally (little yellow)	various	#14–16	Summer	Continent-wide
Winter stone	Capnia / others	#16–18	Dec–Mar	Continent-wide

Fishing Notes

- **Nymph deep and near the bank:** a heavy stonefly nymph (Pat's Rubber Legs, Kaufmann's Stone) rolled along the bottom close to shore produces all year, hatch or no hatch.
- **Time the salmonfly hatch:** it moves upstream a few miles a day as water warms — chase the leading edge for the best dry-fly fishing.
- **Fish big dries tight to the bank:** adults fall from streamside vegetation, so the largest trout hold and feed within a rod-length of shore.
- **Add a twitch:** egg-laying adults flutter and skitter; an occasional twitch of a foam stonefly dry can draw explosive eats.

Midges (Diptera: Chironomidae)

Midges are small, true flies that anglers underrate at their peril. They are the most abundant insect in many rivers and lakes, they hatch every month of the year, and they are the single most important food source through the winter and on heavily-pressured tailwaters. When nothing else is going on, midges are why trout are still rising.

They are not biting mosquitoes (though they look similar) — chironomid midges don't bite. Their value to the angler is in raw numbers: trout eat them constantly, in the larva, pupa, and adult stages, and often in clusters.

Visual Identification

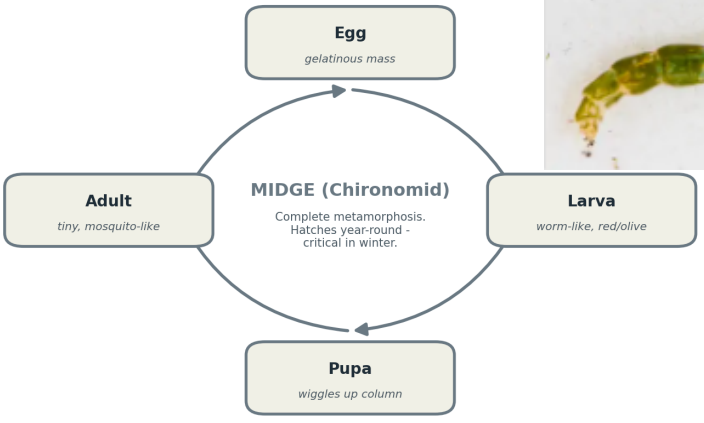
- **Adult:** tiny and mosquito-like, wings held flat in a delta over the body, often with feathery antennae in males; no bite.
- **Larva:** thin and worm-like, wriggling with a distinct S-motion; commonly bright red ("bloodworm"), olive, or cream.
- **Pupa:** comma-shaped, hanging in or just below the surface film with a fuzzy white gill tuft at the head as it emerges.
- **Behavior:** adults frequently mate in clumped clusters, so trout may eat a mouthful at once — imitated by a slightly larger cluster (Griffith's Gnat) pattern.

Size — Physical and Relative

Midges are the smallest insects you'll regularly fish, generally #18–#26 and often just 2–5 mm long. On demanding tailwaters, #22–#24 zebra midges and pupae are staples. A cluster pattern like a Griffith's Gnat effectively fishes a #16–#18 to imitate many midges balled together.

Because they're so small, a trout sipping midges leaves only the faintest dimple on the surface — learn to spot those subtle rises.

Midges Life Cycle



Midge life cycle — complete metamorphosis. Hatches occur year-round, making midges the winter angler's mainstay.

- **Egg:** laid in a gelatinous mass that sinks or floats; huge numbers are produced.
- **Larva:** the worm-like larva lives in bottom silt and debris — the ever-present "bloodworm" trout nymph on tailwaters.
- **Pupa:** the pupa slowly wiggles up through the water column and hangs in the film, one of the most heavily eaten stages.
- **Adult:** a tiny fly emerges and often clusters on the surface to mate, giving trout easy, concentrated meals. Feathery antennae

Geographic Range

Midges are truly everywhere in North America — from high alpine lakes to lowland tailwaters, from the coldest winter rivers to warm stillwaters. They are especially dominant on tailwaters (rivers below dams) like the San Juan, the Bighorn, and countless others, where stable cold flows produce enormous midge populations and year-round dry-fly opportunities. In winter, on almost any trout water, midges are frequently the only thing hatching.

Fishing Notes

- **Winter go-to:** a #20–#24 zebra midge (black, red, or olive) under an indicator, or dropped below a larger nymph, is the classic cold-weather producer.
- **Fish the pupa in the film:** trout key on emerging pupae hanging in the surface — a suspended midge pupa or emerger often beats a full dry.
- **Use a cluster for the dry:** when trout sip clustered adults, a Griffith's Gnat imitates the ball of midges and is easier to see than a single speck.
- **Go small and fine:** light tippet (6X–7X) and precise dead drifts matter more with midges than with any other insect.

Terrestrials (Land Insects)

Terrestrials — grasshoppers, ants, beetles, and crickets — are not aquatic, but from midsummer into fall they blow, hop, and fall onto the water in enough numbers to become a trout staple. They matter most on warm, windy afternoons along grassy or wooded banks, and they offer some of the most exciting, visual dry-fly fishing of the year because the flies are large and the eats are confident.

A well-kept secret: while hoppers get the headlines, ants and beetles actually account for more trout on many rivers. They're small and easy to overlook, but trout will rise for a drifting ant or beetle when they ignore everything else.

Visual Identification & Size

- **Grasshoppers —** Big, folded legs and a fat body; imitations are large and often foam-bodied. Body ~20–35 mm, hook #6–#12; smaller late-summer hoppers as small as #14.
- **Ants —** Distinct pinched "waist" between thorax and abdomen; often winged in mating flights. Body 3–10 mm, hook #14–#20. Fished low in or flush with the film.
- **Beetles —** Rounded, hard-shelled, dark; sit flush and low in the surface. Body ~5–12 mm, hook #12–#18. Black or peacock-bodied foam patterns excel.
- **Crickets —** Similar to hoppers but darker and often earlier/later in season; fished the same way.

Season & Behavior

Terrestrial fishing peaks from July through September. Hoppers become effective as fields dry and populations swell in late July, and are best on warm, breezy afternoons when wind knocks them onto the water. Ants and beetles are present all summer and can produce from morning on; ant falls after summer rains or during mating flights can trigger remarkable feeding. There is no aquatic life cycle to match — you're simply imitating an accident, so presentation near the bank matters more than exact imitation.

Geographic Range

Terrestrials are effective continent-wide but shine on Western freestone and meadow rivers (the Yellowstone, Madison, and countless spring creeks) where grasshopper populations along the banks are enormous, and on Eastern and Midwestern streams with brushy, grassy edges. Anywhere a trout stream runs through fields or woods, terrestrials are worth fishing from mid-summer on.

Fishing Notes

- **Hug the bank:** Cast tight to the bank — terrestrials enter the water at the edges, and the biggest fish hold there waiting.
- **Hopper-dropper:** A hopper with a beadhead nymph dropped below ("hopper-dropper") covers both surface and subsurface and is one of the most productive summer rigs.
- **Make it land:** A deliberate plop of a hopper or a small twitch can draw attention — real terrestrials land clumsily.
- **Ace in the hole:** Keep small ants and beetles (#14–#18) on hand for pressured trout that refuse everything else.

Other Information Worth Having

Beyond identifying the insects themselves, a handful of supporting skills and tools will sharpen this whole effort.

Water Temperature Drives Everything

Insects hatch on water temperature far more reliably than on the calendar. A stream thermometer is the cheapest, highest-value tool you can carry. Rough triggers worth memorizing: Blue-Winged Olives get active around 40–45°F on overcast days; many stoneflies emerge as water reaches the low 40s to upper 40s; Pale Morning Duns and summer mayflies key on the 50s. Cold snaps delay hatches; a warm afternoon can start one early. Also watch that trout themselves stress and stop feeding above roughly 68°F — a reason to fish cooler morning hours in high summer and give fish a break.

"Match the Hatch" — the Core Method

The whole point of this guide is to let you observe what's on the water and choose an imitation of the right size, silhouette, and stage. In practice: watch the water and the air, catch a natural if you can, note its order and size, decide which stage the trout are eating (nymph, emerger/pupa, dun/adult, or spinner/spent), and pick the closest fly you carry. When trout refuse, change size first, then stage, then color. A seine or even a piece of window screen held in the current to sample drifting nymphs removes most of the guesswork.

A Practical Fly Box, by Stage

- **Nymphs / larvae:** Pheasant Tail (#14–20), Hare's Ear (#12–18), zebra midge (#18–24), heavy stonefly nymph like Pat's Rubber Legs (#4–10).
- **Emergers / pupae:** Soft-hackles and sparkle pupa (#14–18), midge emergers (#20–24) — the most under-carried and most productive category.
- **Dries / adults:** Parachute Adams (#12–20) as a mayfly catch-all, Elk Hair Caddis (#14–18), foam stonefly and hopper (#6–12), Griffith's Gnat (#18–22).
- **Spinners:** Rusty spinner and spent-wing patterns (#14–22) for evening and morning falls.

A Few Terms Worth Knowing

Term	Meaning
Nymph / larva	Immature underwater stage (nymph for mayfly/stonefly, larva for caddis/midge).
Emerger	Insect in the act of hatching, trapped in the surface film — a prime target.
Dun / spinner	The two mayfly adult stages: freshly hatched (dun) and mature/mating (spinner).
Spinner fall	Mass die-off of spent mayflies on the water after mating; a major feeding event.
Freestone / tailwater	A river fed by runoff (freestone) vs. released from a dam (tailwater, stable & cold).
Hatch / emergence	The synchronized rise of insects to adulthood that gets trout feeding.

Sources & Further Reading

This guide consolidates established fly-fishing entomology against the following current references. The same sites are linked throughout the photo slots above.

- Troutnut — Mayfly, Caddisfly, Stonefly & Midge Encyclopedias (photos of every stage) — https://www.troutnut.com/hatch/4/Insect-Ephemeroptera-Mayflies
- BugGuide — order pages for Mayflies, Caddisflies & Midges (North American photos) — https://bugguide.net/node/view/78
- Wikimedia Commons — freely-licensed insect photo galleries (search by order/stage) — https://commons.wikimedia.org/wiki/Category:Ephemeroptera
- Fly Fisherman — Stonefly Hatches Explained (salmonflies, goldens, skwalas) — https://www.flyfisherman.com/editorial/stonefly-hatches-explained/549271
- Yellow Dog Flyfishing — Golden Stonefly Hatch: timing, tactics & flies — https://www.yellowdogflyfishing.com/blogs/back-stage-pass/golden-stonefly-hatch
- Wild Water Fly Fishing — Caddis life cycle & fishing a caddis hatch — https://wildwaterflyfishing.com/blogs/guides/caddisfly-fly-fishing
- WiFlyFisher — Hendrickson & Trico mayfly hatch references — https://wiflyfisher.com/hendrickson-mayfly-hatch.asp
- Fly Fishing Bozeman — Insects of Montana (mayflies, hoppers, beetles, March Brown) — https://flyfishingbozeman.com/fly-fishing-montana/insects-of-montana-fly-fishing
- Drifthook — Guide to Fly Fishing Hook Sizes — https://drifthook.com/blogs/discover/guide-to-fly-fishing-hook-sizes