

ATTACK OF THE CINDER WORMS!



Striper Secrets for the Northeast's Spring Hatch

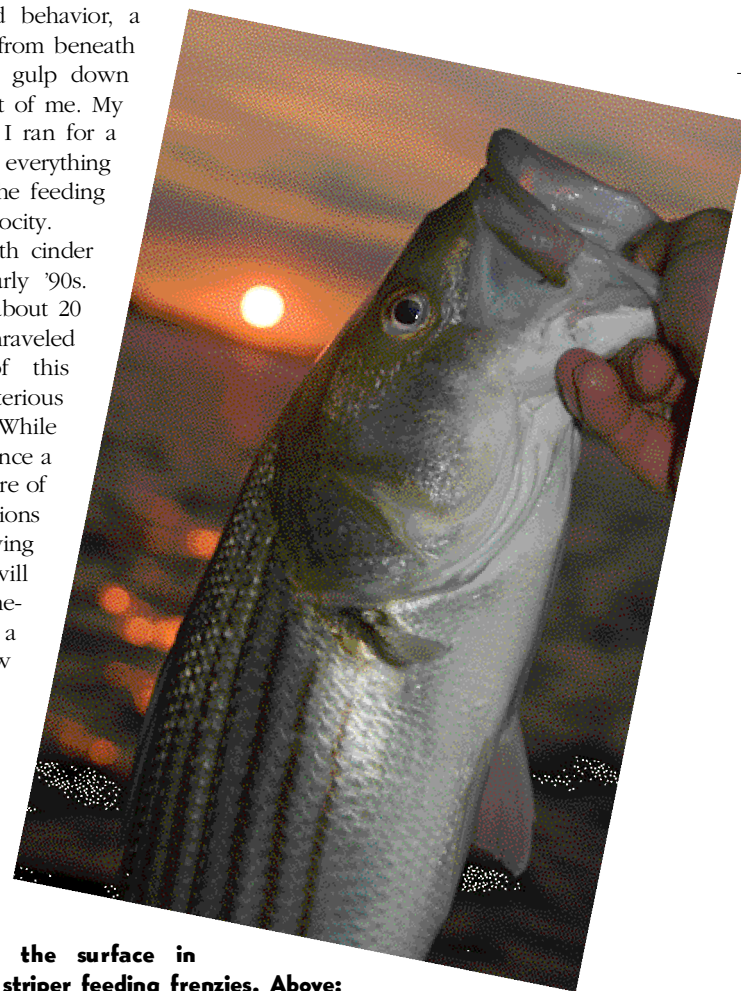
BY CAPT. JOHN MCMURRAY

THE FIRST THING I HEARD AS I NEARED THE LIT-UP BOAT BASIN WAS A dull pop, as if someone stepped on a Styrofoam cup. Immediately afterward, I heard another. As I moved closer, I could see stripers swirling and sucking down bait throughout the lighted expanse. The water's surface moved, alive with hundreds, perhaps thousands, of tiny worms that darted and swam in small, erratic circles beneath the electric lights.

As I observed the odd behavior, a 20-pound striper rolled up from beneath the pier where I stood to gulp down several worms right in front of me. My heart rate skyrocketed and I ran for a rod. For two hours, I threw everything in the box to no avail as the feeding activity only increased in ferocity.

That first experience with cinder worms occurred in the early '90s. Since then, I've witnessed about 20 such hatches and have unraveled some of the secrets of this most intriguing and mysterious Northeast phenomenon. While some common factors influence a hatch, scientists remain unsure of the exact timing and conditions that launch one, so knowing when and where one will happen requires some homework. Then, when you find a hatch, you must somehow fool the frenzied fish.

Hit it right, though, and this may just be the ultimate experience in Northeast light-tackle fishing, and possibly the only opportunity to conquer a 40-inch striper with a 1-inch fly.



Cinder worms swarming the surface in Northeast estuaries mean striper feeding frenzies. Above: Most worm-hatch action happens in late afternoon or at night.

CAPT. JOHN MCMURRAY ©

WORMOLOGY

Nereis limbata — called “cinder worm” by regional fishermen — is just one species among the hundreds that comprise the *Nereis* genus of polychaete (“many-bristled”) worms. Its relatives include the sandworm (*Nereis virens*) and the common clam worm (*Nereis succinea*).

Little scientific literature specifically addresses *Nereis limbata*, as it has no food value and represents but one menu item for marketable fish. Thus, technical publications don't describe its geographic range.

Anecdotal information suggests that populations capable of producing a substantial hatch range from Chesapeake Bay to Maine. Most cinder-worm hatches seem to occur between New York and Massachusetts, with Long Island Sound's estuaries hosting the most productive events. Martha's Vineyard and Nantucket are also hot spots for cinder-worm activity.

Cinder worms generally measure 1 to 3 inches long, with an off-color head and a pinkish-red body; however, size, shape and color vary locally.

Alan Caolo, author of *Sight-Fishing for Striped Bass*, has fished Rhode Island hatches for well over a decade. “We've got [cinder worms] that measure 3 or maybe 4 inches in one Rhode Island salt pond. In another pond just a few miles away, there are smaller worms measuring an inch or less,” he says.

The late Long Island guide Capt. Bob Robl once explained to me that, on the north shore of Long Island, reddish colored worms with an off-white or tan-colored head reside in the Nissequogue River. On Long Island's North Fork, worms sport red bodies and orange heads, but just to the south, across Peconic Bay, the worms feature dark heads and pinkish bodies.

The variance probably results from the fact that these worms don't move far, so little mixing occurs between populations. Such local variations may also account for a lack of consistency regarding the timing of hatches: Each hatch may depend on specific local conditions.

HATCH DYNAMICS

Like all nereids, cinder worms burrow in the mud for most of their lives. Hatches only occur when they leave that safe environment to spawn.

Spawning worms become easy prey. And because all the activity happens on the surface, anglers can see fish feeding. A good cinder-worm hatch can make any red-blooded angler's heart rate go through the roof!

These events come as close to a freshwater bug hatch as a saltwater fly-fisher can get, down to the surface frenzy and the difficulty in eliciting a strike. Even the term



CAPT. JOHN DURESI

Above: Cinder worms generally feature an off-white head and pink body, but characteristics vary locally. Opposite: Fish the worm hatch from a boat, or anchor up and wade with a fly rod or light spin tackle.

“hatch” somewhat applies, although “spawn” more accurately describes the event.

Cinder-worm swarms happen in spring in most regions and often occur in the dead of night, although late-afternoon hatches are fairly common in Rhode Island and Martha's Vineyard.

Anglers normally observe hatches from May to early July, although the only scientific study of *Nereis limbata*, published by Frank Lillie in 1912, states that swarms took place at Woods Hole, Massachusetts, from June to September. While it may be possible to observe a spawn later in the summer, I was unable to find an angler or guide who had witnessed a substantial hatch after July.

In my home waters (Jamaica Bay, New York), the best cinder-worm hatches seem to occur in May. Caolo says late May to the end of June is prime time for Rhode Island. Noted eastern Long Island guide Capt. David Blinken says his best chance at finding good cinder-worm hatches begins in late May and lasts into early July. Anglers on the Connecticut side report similar results, and Martha's Vineyard, Massachusetts, guide Capt. Tom Rapone says his hatches run from May to July as well.

Since cinder worms live in mud, swarms generally occur in areas with mud bottoms. “They can happen over hard bottom, but there must be soft



ALAN CAOLO

conditions, water and air temperature, and current flow. These variables often don't coincide, and each population seems to follow different rules. Even if conditions set up just right, predators may not be present.

That's where local knowledge pays off. “Interestingly, I've found that small worm hatches can be isolated events within one estuary system,” Rapone notes. “I've had nights where one cove is chock-full of stripers slurping worms, while in a nearby cove, bass are popping on silversides without a worm in sight.”

Caolo says these peculiar situations “explain why so many hypotheses are correct and at the same time contradictory.” Anglers should visit local tackle shops where other fishermen network, and simply gain as much experience and time on the water as possible during these events.

MOON OR TEMPERATURE?

Plenty of evidence suggests that the moon affects cinder-worm hatches. “The occurrence of swarming is dependent more on lunar cycle than any other factor,” Lillie wrote. “Each run begins near the time of the full moon, increases to a maximum during successive nights and sinks to a low point about the time of the third quarter, then again rises and falls to extinction shortly after the new moon.”

Worms may swarm on any night during their mating cycles, but most activity occurs around the new and full moons, Sedotti notes. Many believe three to four days before a new or full moon marks the peak time.

muddy bottom in the vicinity of the hatch,” notes East Hampton, New York, guide Capt. Paul Dixon. All guides interviewed recommended estuaries and salt-marsh habitat as likely hatch locations.

Dixon looks for a tidal outlet. He believes strong currents start the hatch. “It's a part of the species' survival technique to distribute the fertilized eggs to other areas nearby that could sustain a population,” he says.

Blinken recommends fishing areas with feeder creeks where the current moves worms past stripers that set up in the lees.

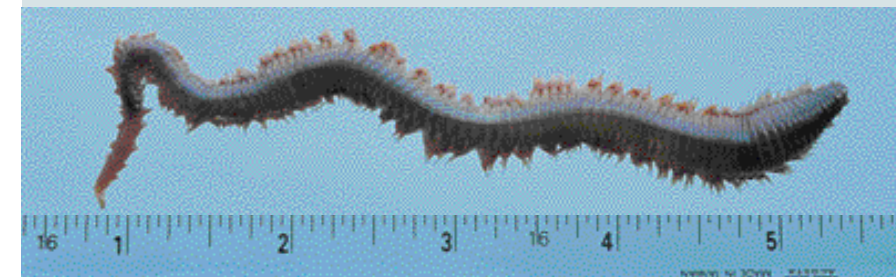
I prefer fishing over soft mud bottom and in lighted marinas. In his study, Lillie noted that cinder worms moved toward the light of his lantern. “Cinders are photophilic,” says Connecticut fly-fishing teacher Mark Sedotti, “so dock lights draw them.”

Experienced anglers acknowledge that conditions must be perfect for a full-blown hatch to occur. Variables include moon phase, tide range, weather and wind

SF INSIGHT

SPAWNING SPECTACLE

As cinder worms emerge from their muddy homes to spawn, they metamorphose, developing a paddle on their tails and losing all body segments except those that contain sex cells. They engage in a coordinated movement to the surface where the transformed worms swarm in large concentrations, releasing sperm and eggs in a vast reproductive frenzy. After spawning, the adults die and the fertilized eggs eventually drop to the muddy bottom where they grow into a new generation.



ALAN CAOLO

Most cinder worms measure 1 to 3 inches; however, some grow larger, such as this one at 4-plus inches.



Successful worm hatches seem to depend on water and sediment temperatures, which means some happen in late afternoon and others late at night.

"You'll see a few the week before; the next day there'll be more and more," notes Dixon. "Then, three days before the moon, there are billions."

Caolo takes another view, believing that worm events highly correspond to temperature. "Some folks say it'll happen around the full moon in May, but personal experience tells me that if it's cold, it won't happen," he says. "It has little to do with moon phase but everything to do with water and sediment temps."

Caolo reasons that new- and full-moon phases create very high and low tides. The

worms may emerge after the sun has warmed the sediment during a lower than usual low tide. But he also quickly points out that a successful spawn requires a certain water temperature. "If you have a day with high sun and low water because of the full-moon phase, [the spawn] may go strong for two days. Then, if it gets cold and gray, that will turn it off right away."

His theory also helps explain why hatches seem to happen in late afternoon in Rhode Island yet in the dead of night in Connecticut and New York. Rhode Island ponds lie close to the ocean and

experience rigorous tidal flushing, which keeps them cool. As water warms with the heat of the sun — later in the day — rising temperatures potentially trigger a hatch.

Connecticut ponds lie farther from the ocean, experience smaller tides and warm very quickly during the summer. "So perhaps the right set of top and bottom temperatures unfold as the surface water cools in the evening," he says.

Dixon says that during the early season in Long Island's Peconics, worm hatches occur during the afternoon on an outgoing tide. As spring progresses, through June and into July, hatches become nighttime events, suggesting the timing may depend on temperature.

My experience reinforces the temperature hypothesis: I've looked extensively for worms on new and full moons in Jamaica Bay only to get skunked. Yet during hot spells and high-sun days with medium tides, I've experienced giant hatches the following nights.

Two studies in the journal, *Marine Biology*, support Caolo's theory. In 1988, O. F. Müller exposed *Nereis* worms to different temperatures in a lab. He induced maturation and spawning by raising temperatures, emulating the natural warming of spring. In 1987, Frey and Leuckart determined that metamorphosis to spawning stages, as well as swarming, could be induced by raising temperatures around the time of the new moon. Abrupt increases in temperature caused swarming to occur at different times of the lunar cycle.

Water temperatures in the upper 50s to mid-60s seem to stimulate the worms in the Rhode Island area, Caolo says. Long Island Sound anglers look for water in the 60- to 70-degree range.

Wind may also be an inhibiting factor. "The hatch seems to coincide with any stretch of calm, sunny weather," Rapone says. Wind shuts down a hatch.

Lillie's study describes cinder-worm mating activity in such a way that suggests calm conditions must be present. Waves or ripples would disrupt the event: "When a female appears, she is soon surrounded by several males, which swim rapidly in narrow circles about her on the surface."

CURRENT CONSIDERATIONS

"I have not seen a hatch really get going until about an hour into the outgoing tide," Dixon says. Even in non-tidal salt ponds, hatches don't seem to really erupt until well into the ebb.

Regardless of how current affects the worms, water flow definitely helps anglers. In glassy ponds, bass quickly note any mistake anglers make trying to imitate the erratic spawning movements of a 3-inch cinder worm.

SF INSIGHT

CINDER WORMS OF THE SOUTH

Palolo worms (*Palola viridis*) resemble cinder worms, yet they live the bulk of their lives in hard reef instead of soft mud. They're found primarily in the Florida Keys, and their spring spawn occurs mainly on ocean-side flats. Their prime predator: tarpon.

Anglers commonly witness as many as a thousand tarpon rolling — as far as the eye can see — yet they struggle to hook one. Many folks say palolo worms act as an aphrodisiac and make tarpon appear drunk.

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DAVID SICK

An assortment of worm-hatch flies helps anglers match the hatch or present an offering that draws reaction strikes.

Without current, fish cruise to the worms to feed. An angler must note and anticipate the movement of individual fish. When the current flows, "worms are fairly immobile in the face of even moderate tidal flow," Rapone notes. "In such conditions, strippers line up at feeding stations like trout in a stream, to take advantage of the easy meal sweeping by. Strippers holding in a current seem far more likely to single out individual targets, one of which may be your fly or lure."

HATCH MATCH

"Like a trico [fly] hatch on a river, [the cinder-worm hatch] starts out slowly and there isn't that much bait in the water, but as the tide increases, the number increases. As more fish find these baits, they get tougher to catch," Dixon says.

Fishing the hatch on days leading up to the peak or on days when the activity begins to wane can prove more productive because the bass find fewer real worms to eat. On non-peak days, first try matching the hatch.

Fly-fishers have an advantage over lure fishermen because flies more readily match the size and weight of the worms. Still, lure anglers can use inventive options that combine lures and flies. Some opt to tie a cinder-worm fly several feet behind a plug. By working the plug very slowly, they can draw strikes on the trailing fly.

Some anglers employ a float with a cinder-worm fly tied 2 to 3 feet below.



ALAN CAOLO

Conventional snapper-bluefish rigs with a popping float work quite well.

The red color of a cinder worm ranges from an orange-brown to a reddish-pink, so start by matching the color and size. Popular cinder-wormfly patterns currently on the market include Dixon's Fireworm, with a marabou tail and short, stout bright-red Lite-Brite body.

I use a simple fly consisting of a 1/0 hook, an olive Ice-Chenille head and a 2-inch red rabbit-strip tail.

"I'll almost always tie on a 1- to 3-inch pink bunny fly plucked extremely sparse — nearly to bare rabbit hide," says Rapone. "It really comes to life once wet." Use any 1- to 3-inch fly that imparts a lot of movement when stripped very slowly. Cinder worms feature tiny bristles on their sides, which are constantly moving.

On the third or fourth day of the hatch, when thousands of worms swarm a small area, anglers may need a different approach. "There's often so much bait in the water, just throwing something bigger will induce strikes," Blinken says. "You've got to somehow set your offering apart."

I've caught some of my best fish during the peak of the hatch on 4- or even 6-inch all-black deceivers. And sometimes making a commotion on the surface elicits strikes when the fish won't touch anything else.

Boston fly-tying legend Jack Gartside makes a cinder-worm "Gurgler" fly that creates a tremendous commotion on the surface yet still almost matches the size and color of a cinder worm. However, almost any surface fly works; bass don't appear to be hitting it because they think it's a worm. They seem to hit surface flies out of pure instinct. Work surface flies very slowly during a cinder-worm hatch and pause them occasionally. Often, big bass hit on the pause.

Going big during the peak applies to lure anglers as well. "I fish the worm hatch with a 5- to 6-inch walk-the-dog-style plug, looking for a knee-jerk reaction," Rapone says. "At times, the larger plug pulls large fish out of what appears to be a pile of slurping schoolies."

Blinken prefers black-over-gold floating plugs like Yo-Zuris or Rapalas and Zara Spooks. Caolo works soft plastics such as 6-inch pink Slug-Gos:

CINDER-WORM HATCH GUIDES

Capt. David Blinken
 Eastern Long Island, New York
 631-324-2860
www.northflats.com

Capt. Paul Dixon
 Eastern Long Island, New York
 631-329-6186
www.flyfishingmontauk.com

Capt. Paul Koopman
 Stamford, Connecticut
 203-561-9683
www.saltyflies.com

Capt. John McMurray
 Western Long Island, New York
 718-757-7339
www.nycflyfishing.com

Capt. Tom Rapone
 Martha's Vineyard, Massachusetts
 508-922-1754
www.hightygratoryfishing.com

Capt. Greg Snow
 Block Island/Bristol, Rhode Island
 401-439-0953
www.snowflycharters.com

"They're about as deadly as you can get," he says.

PRESENT ARMS!

When worms emerge, they swim to the surface, where they dart and swim in rapid circles: not an easy activity to imitate. Caolo uses a floating fly line and a 7- or 8-weight rod and initially keeps the fly near the surface, making very small, erratic strips. Then, he allows the fly to drop for a few seconds before making a few more strips to lift it back up.

However, he also recommends experimenting with different flies and retrieves. "One night, they like it one way, and the next they like it differently," he says.

Dixon, who does most of his fishing on moving water, recommends dead-drifting the fly with a floating line while mending it, keeping just enough tension to feel the strike. "The key is to control the line throughout the drift and to stay as close in touch with the fly as possible," he says.

Dixon also recommends lifting the rod tip so the fly sits on the surface and then trying to slightly skate it toward you.

Lure anglers must also slow down presentation during a hatch. Fish just cruise and sip, or hold in the current, waiting for worms to sweep past. Anything drawn quickly through the water probably won't get touched.

"Fish don't put out more energy than they need to in acquiring prey," Sedotti says. "That cinder worm can't get away, thus the bass feeds on it with very little energy expenditure."

Hits feel like a very gentle tug or tiny pause. A bass just stops the fly; anglers must sense that before the fish spits the bait. "It's not a booming hit," Caolo says. "When the fish takes, you've got to feel it and just come tight."

Cinder-worm hatches are a wonderfully mysterious occurrence. Just witnessing the natural spectacle of strippers gorging on these small worms during a hatch can be worth the price of admission. So do your homework, put in the effort and get out there at the most likely time to find a hatch. You can't beat the payoff.

Capt. John McMurray works as director of grants programs at New York's Norcross Wildlife Foundation, which has distributed more than \$20 million in conservation grants since 1982. He also owns One More Cast Charters in Jamaica Bay, New York. He writes regularly for Sport Fishing, Salt Water Sportsman, Fly Fishing in Salt Waters and other fishing and resource publications. Contact him at 718-791-2094 or info@nycflyfishing.com.

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