INTRODUCTION TO FLY FISHING

BY
MARK SHELTON, PH.D.
Introduction to Fly Fishing

Instructor:
Mark Shelton, Ph.D.
mshelton@calpoly.edu
(805) 756-2161

Goals for class:
• Everyone learns fly fishing basics
• Simplify the science, technology of fly fishing
• Have fun!

Course Content:

Wednesday – 6:00-9:00 p.m.

• Sources of information
  - Books, magazines, web sources, T.V. shows, fly fishing clubs
• Fly rods, reels, lines, leaders, waders, boots, nets, vests, gloves, float tubes, etc.
• Basic fly fishing knots – how and when to use
• Game fish identification, behavior – trout, bass, stripers, steelhead, etc.

Friday – 6:00-9:00 p.m.

• Aquatic entomology - what the fish eat in streams, lakes and ponds
• Flies to imitate natural fish food
  - Dry flies, nymphs, streamers, midges, poppers, terrestrials, scuds, egg patterns
• Fly fishing strategies
  - Reading the water
  - Stealthy presentations
  - Fishing dries, nymphs, etc.
  - Strike indicators, dropper fly rigs, line mending

Saturday – 8:30-4:30 p.m.

• Fly casting video
• Fly casting – on lawn
• Trip to local farm pond for casting on water
• Trip to local stream to read water, practice nymphing
FLY FISHING INFORMATION SOURCES

Books:

A Treatise of Fysshynge with an Angle. 1496. Dame Juliana Berners?
1st book on fly fishing


Books con’t.


Trout Flies: Proven Patterns. 2001. LaFontaine.


Magazines:
Fly Fisherman
Fly Rod & Reel
California Fly Fisherman
Trout (Trout Unlimited)
Southwest Fly Fishing
Northwest Fly Fishing

Catalogs:
Cabelas
Bass Pro Shops
Sierra Trading Post

L.L. Bean
Orvis
Streamborn

Dan Baileys
The Fly Shop
Bob Marriott’s

T.V. Shows (OLN):
Cabela’s Outfitter
Fly Fishing America

Hunt for Big Fish
The KT Diaries

North to Alaska
One More Cast – Shaw Grigsby

Websites:
The Fish Sniffer - http://www.fishsniffer.com/
Troutnut - http://www.troutnut.com
Midcurrent Fly Fishing News – http://www.midcurrent.com
Mark’s Surf Fishing Page – http://home.att.net/~surf.perch/Main.html
Fly Fishing Organizations:
Santa Lucia Fly Fishers – Margie’s Diner, SLO, 2nd Thursday of month, 6:00 p.m.
- call 934-2476 or 543-7596 for more information
Trout Unlimited
Federation of Fly Fishers
California Fly Fishers (SACTO area)
Shasta Mayflies (women only!)

California Fly Fishing Trade Shows:
San Mateo, Ontario

Local Fly Shops:
http://www.holeinthewallflyshop.com
Four Season’s Outfitters – 432 Higuera St., San Luis Obispo – 544-5171

FLY FISHING EQUIPMENT

Fly Rods:
Classified by:

Weight (0000-15) of line used

Choice of rod weight depends on type of fishing and size of flies used
- e.g. size 2-5 rods good for small streams, small flies, trout, panfish, surf perch
- 5-6 wt. rods good for trout, bass, larger flies
- 7-8 wt. rods good for larger bass, steelhead, salmon, larger flies, poppers
- 9+ wt. rods good for salmon, pike, tarpon and other aggressive saltwater fish

Action – slow-medium-fast
- how fast rod straightens out after flexing (“loading”)
Slower action rods provide gentler presentation of flies
Faster action rods have power for larger flies, windy conditions, larger fish

Length – most are 6-10’
- Spey rods

Shorter rods (7-8’) good for creeks, brushy streams, shorter casts
Medium length rods (8-8.5’) good all around
Longer rods (9’+) give best line control for nymphing, mending line, float tubes, distance
Fly Rods con't.
Blank material – bamboo, fiberglass, graphite, graphite composites

Graphite rods have best combination of sensitivity, power

Quality = cost! ($25-$4,000+)

Lots of cost in cosmetics – cork quality, rod guides, rod appearance, rare wood in reel seat, etc.

Good rods have quality guides...smooth, often coated with metal or ceramics
-stripping guide should be large for funneling line; snake guides for castability

Number of rod sections – travel vs. 2 piece
-Airline 62” linear bag rule

Fly Reels:
Main purpose = to hold fly line!

Cost: $20-$1000+

Right vs. left handed – personal preference

Standard vs. “large arbor”
-line and backing storage
-line retrieve rate

Manual vs. automatic

Drag systems: click vs. disk (usually with cork washer....store with drag loose)

Try to balance reel to rod

Fly Lines:
Provide weight to deliver the fly, rather than lure weight

Size: 0000-15, based on line weight

Usually 90’ long

Tapered vs. level lines:
-level is inexpensive, marginally useful
-Double taper (DT) – good for delicate presentations
-Weight forward (WF) – better for distance; best all around
-Shooting heads – 24-30’ long, connected to running line – distance champs
-“integrated shooting heads”
Fly Lines con't.

Floating lines – for dry flies, poppers, nymphing with weighted nymphs

Sinking lines – types I-VI, slow to fast sink (inches/sec.)
- good for nymphs, streamers...get flies down
- harder to pick up line off water
- uniform sinking lines best – e.g. Teeny® lines
- Sink-tip variation

Slick lines easier to cast
- keep line clean
- check for nicks
- coated lines

Fly line backing:
Why? 1) more line if big fish hooked
2) fills out spool on reel

Backing types: - Dacron, micron, braided, gel-spun (e.g. Spiderwire®)

Color – best if different than fly line

Leaders:
Connect fly line to fly, hopefully invisibly!
- Knotted, knotless, braided

Usually tapered: butt – tippet
- straight mono O.K. for aggressive fish (e.g. stripers)

Use Surgeon's knot to make your own!

Tippets: - classification: 0X-8X
- Breaking strength: subtract tippet size from 9 = lbs. test
  - e.g. 9-6X = 3 lbs. tippet strength
- size of tippet depends on size of fly used
- Shock tippet (bite tippet) – wire or heavy mono for pike, etc.

- Fluorocarbon vs. monofilament

Leader length – 7.5-10’ average
- longer good for delicate presentation
- depends on water clarity, spookiness of fish
- shorter leaders good for sinking line fishing (4-6’)
  - flies can “suspend” underwater on long leaders

Birds and leaders
Waders:
Keep you dry, unless they leak, you fall in, etc. (option: wet wading)

Neoprene vs. breathable
- Breathable wader repair – Aquaseal® for pinholes; seam tears, you’re done!

Bootfoot vs. stockingfoot

Boot soles – rubber, felt, studded

Wading Staffs:
From sticks to folding aircraft aluminum

Nets:
Good when wading

Gloves:
Sun gloves, Neoprenes, Ragg wool (fingerless only!)

Float Tubes:
For lakes, ponds

Nippers:
Essential!

Forceps:

BASIC FLY FISHING KNOTS – HOW TO TIE AND WHEN TO USE

Lots of knots... lots of opinions... keep it simple

Good knots ~ 80-90% of original line breaking strength

All knots should be lubricated as you tighten

Mark’s 4 essential knots:
1) **Slip knot** – connects backing to reel
2) **Nail knot** – backing to fly line, fly line to leader
3) **Surgeon’s knot** – for making leaders, adding tippet
4) **Clinch knot** – for attaching leader to fly

Two other very useful knots:
1) **Perfection loop** – for loop-to-loop connections
2) **Loop knot** – for tying on streamers, etc. for natural movement
GAME FISH IDENTIFICATION AND HABITS

**Bass**
Found nearly everywhere
Aggressive!
Like structure
- rocks, sunken logs/brush, dropoffs, ledges, lily pads, old streambeds, docks

**Smallmouths** like cooler water......67-71°F optimal
**Largemouths** like warmer water......65-78°F optimal

Bass food – anything they can catch (ambush hunters)
- favorites: crawdads, shad, minnows, worms, frogs, insects

Bass generally avoid light – most active early, late
- great topwater fish

Local bass fishing spots:
• Lakes – San Antonio, Nacimiento (Spotted, White bass), Santa Margarita, Lopez
• Ponds – Fort Hunter Liggett, private farms
• Rivers – Nacimiento at Camp Roberts, Santa Ynez above Cachuma L.

Other good bass spots in California:
• Delta
• Most reservoirs (“trophy bass” lakes – Castaic, Dixon)

**Striped Bass (“stripers”)**
Native to eastern states, now throughout U.S.
Anadromous – move between salt and freshwater
Spawn in major rivers in California – e.g. Sacramento
Some lakes have land-locked populations
Very aggressive! Eat just about anything
Favorite foods: baitfish – minnows, shad, sculpins, anchovies
Watch for bird activity

Local striper fishing spots:
• Lake San Antonio

Other good spots in California:
• San Luis Reservoir
• California Delta (best fall-winter, on “big” tides)
• Sacramento river
• Pacific ocean – northern California, S.F. Bay
Trout
Rainbow, Golden – Native to California
Brown – from Europe (“German Brown”)
Brook – from eastern U.S.

Primary target for fly-fishermen
Can be finicky eaters, especially during a “hatch”
Easiest to catch in low light
- evening hatches
90% of trout’s diet is aquatic insects
- nymphs important to fly fishermen
Other trout food:
- terrestrial insects – ants, hoppers, beetles
- freshwater crustaceans – shrimp, scuds
- worms – Tubifex, annelids

Trout fishing spots:
• Salmon creek
• Santa Ynez R.
• Arroyo de la Cruz R.
• San Carpofuno R.
• Nacimiento R. at Camp Roberts
• Lakes – Lopez, Santa Margarita

Best trout fishing spots (in my opinion!):
• Sierra lakes and streams, east and west side
• Northern California streams
  - Sacramento, McCloud, Pit, etc.

Panfish – Bluegills, crappie, perch, redear sunfish
Easy to catch.....great for kids and beginners
Found everywhere!
Eat insects, worms, crustaceans
Tend to have small mouths, sometimes tender (crappie)

Panfish fishing spots:
• Farm ponds
• Fort Hunter Liggett ponds
• Lakes – Santa Margarita, Lopez, Nacimiento, San Antonio, Cachuma
• Streams – Santa Ynez, Nacimiento, Kings (above Pine Flat Dam)
AQUATIC ENTOMOLOGY

The study of insects with aquatic life stages

Life Cycles:
Incomplete – egg-nymph-adult
- Mayflies, Stoneflies, Dragonflies/Damselflies

*Mayfly variation:* egg-nymph-dun (1st winged adult) – spinner (sexually mature adult)

Complete – egg-larva-pupa-adult
- Caddisflies, Midge, Mosquitoes, other true flies (gnats, deer flies, horse flies)

ARTIFICIAL FLIES

>1 million insect species
>30,000 artificial flies

- Some flies imitate natural food - e.g. insects, worms, crustaceans, etc.
- Some flies are attractors - suggest food, rather than imitate
  - e.g. Royal Wulff, Humpy, Trude

General Fly Types:
- Dry flies – float on surface – flies, poppers, mice, frogs
  - use of floatants
- Wet flies – sink – nymphs, streamers, scuds, shrimp, crabs, worms, eggs
  - fly sink material, weights

Tips:
- keep hooks sharp
- go barbless

Flies for Game Fish:
Good bass flies:
- Streamers (closers, deceivers, zonkers, wooly buggers, whistlers)
- Cork poppers
- Deer hair bugs

For streamers, use sink-tip or full-sinking lines; shooting heads good
For poppers/bugs, use floating lines, including shooting heads for larger types

Good striper flies:
- Streamers
Flies for Game Fish con’t:

Good trout flies:
• Nymphs – Hare’s ear, Prince, Pheasant tail, midges
• Dries – Adams, Blue-winged olive, Pale morning dun, Mosquito, Humpy, ants, Elk Hair Caddis
• San Juan Worms
• Scuds (freshwater crustaceans)
• Streamers

Good panfish flies:
• Nymphs – just about anything will work; beadheads very effective
• Streamers – keep ‘em small
• Dries – cork poppers, size 4 and smaller, with rubber legs

Selecting Flies:
• Visit a local fly shop
• Look for hatch charts, local fly fishing guidebooks
• Look streamside – spider webs, on brush, under rocks for insects
• Hire a fishing guide for ½-1 day

Fly Tying:
• Fun hobby
• Saves money, but takes time
• Good when the same fly pattern used often
• Great to catch fish on your own creation!
### HATCH CHARTS

#### Hatch Chart for Davis Lake

<table>
<thead>
<tr>
<th>Hatches</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caddis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Callibaetis Mayflies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scuds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leeches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dragon Fly Nymphs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damsel Fly Nymphs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterboaiemen &amp; Backswimmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chubs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Deschutes River Hatch Chart

<table>
<thead>
<tr>
<th>June Hatch Chart and Pattern Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insect</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Mayfly, Blue Winged Olive (Baetis)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Pale Evening Dun (Heptagenia)</td>
</tr>
</tbody>
</table>
FLY FISHING STRATEGIES

Plan trips ahead of time:
- Make list of gear
- Check fishing regulations (seasons, bag limits, gear allowed, e.g. barbless flies only?)

Times to fish:
Most game fish easiest to catch early & late
- Many game fish avoid sunlight (fish lack eyelids)
- Fish are cold-blooded, may reduce activity in heat of day, when water very warm
- Overcast, cloudy days can be good all day
- Tailwaters, spring-fed creeks usually consistently good

Evening hatches — fish often go wild!
- SACTO river stonefly hatch
- Sierra high lakes mosquitoes, midges
- Lakes — largemouth bass, panfish
- Streams — brown trout

Look for feeding birds
- Feeding on insects — indicates hatch is on
- Feeding on baitfish, e.g. minnows, shad — pushed to surface by larger fish (“boils”)

Be stealthy!
- Wear clothes that blend into scenery
- Approach fishing spot quietly, slowly; stay low, in shade if possible
- Don’t wade unless necessary — sound travels 4X faster in water than in air (Kreh)
- Kneel or crawl to cast to very close fish, in clear water
- Speak softly around fish

Fly Setups:
- Single fly
- Double fly (dropper or trailer)
  - Dry/wet and double nymph
- Strike indicators

Fly Presentation:
- Critical!
- Must look natural for most game fish to bite
- Trout often in feeding “zones” — won’t move far to feed
  - Need accurate casts at these times
Casts must be drag-free
- "mending" line concept
Bass/panfish/pike are opportunists....a noisy cast may help!

FLY FISHING STRATEGIES con’t.

Reading fish water:
• Why? Most water has no fish.....
• Successful fishermen avoid this water and concentrate where the fish are (art & science)

Streams:
• Fish face into current
• Good spots: ripples (if not too shallow)
pockets (before, after rocks)
undercut banks
seams of 2 currents
pools – esp. heads and tails
under logs

• Trout like water that:
  - is cool -52-56°F – Brookies
  - 55-60°F – Rainbows
  - 60-65°F – Browns
  - moves at right speed
  - has good oxygen levels
  - has food
  - is protected (shady, broken surface – e.g. ripples)

Stillwater:
• Fish may cruise shoreline, weedlines for food
• Seek depth for optimum temperature
• Fish often associated with structure, especially bass
• Look for creeks entering, leaving lakes
• Old roadbeds
• Springs; e.g. Lake Almanor brown trout story

Fishing Etiquette:
• Or, how to avoid fist-fights and gunshot wounds!
FLY CASTING

Casting principles:
- Smooth casts best
- Pretty casts don't equate to catching fish
- Need tight loops for distance
  - exceptions: heavy flies/poppers, double fly rigs, weight on leader
- Casting stroke varies with distance of cast, wind, obstacles, rod action, etc.
  - ignore "10-1" clock rule
- Must "load" rod to cast line
  - rods load differently, depending on action, line weight
  - "uplining"
- Line control essential

Main types of casts:
- Forward cast
- Side cast
- Roll cast
- Double haul
  - speed of "haul" affects distance
  - essential for windy conditions
  - water haul variation