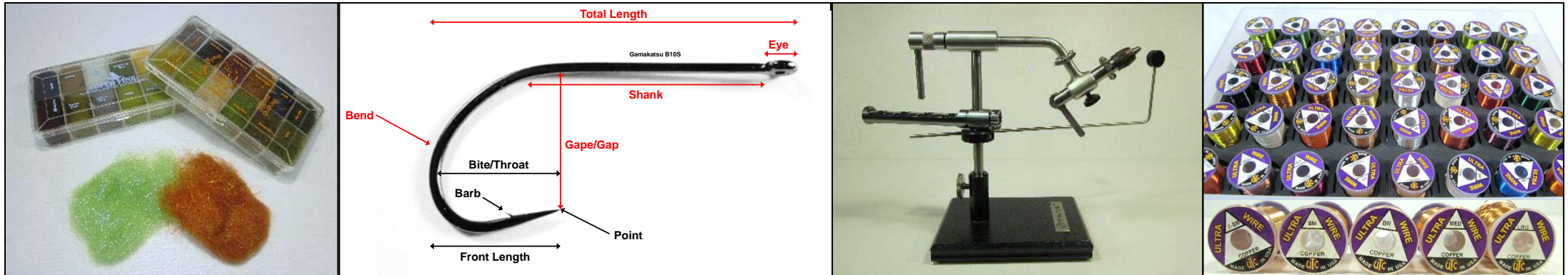


Introduction to Fly Tying

Joe Walther
walther.engineering@gmail.com

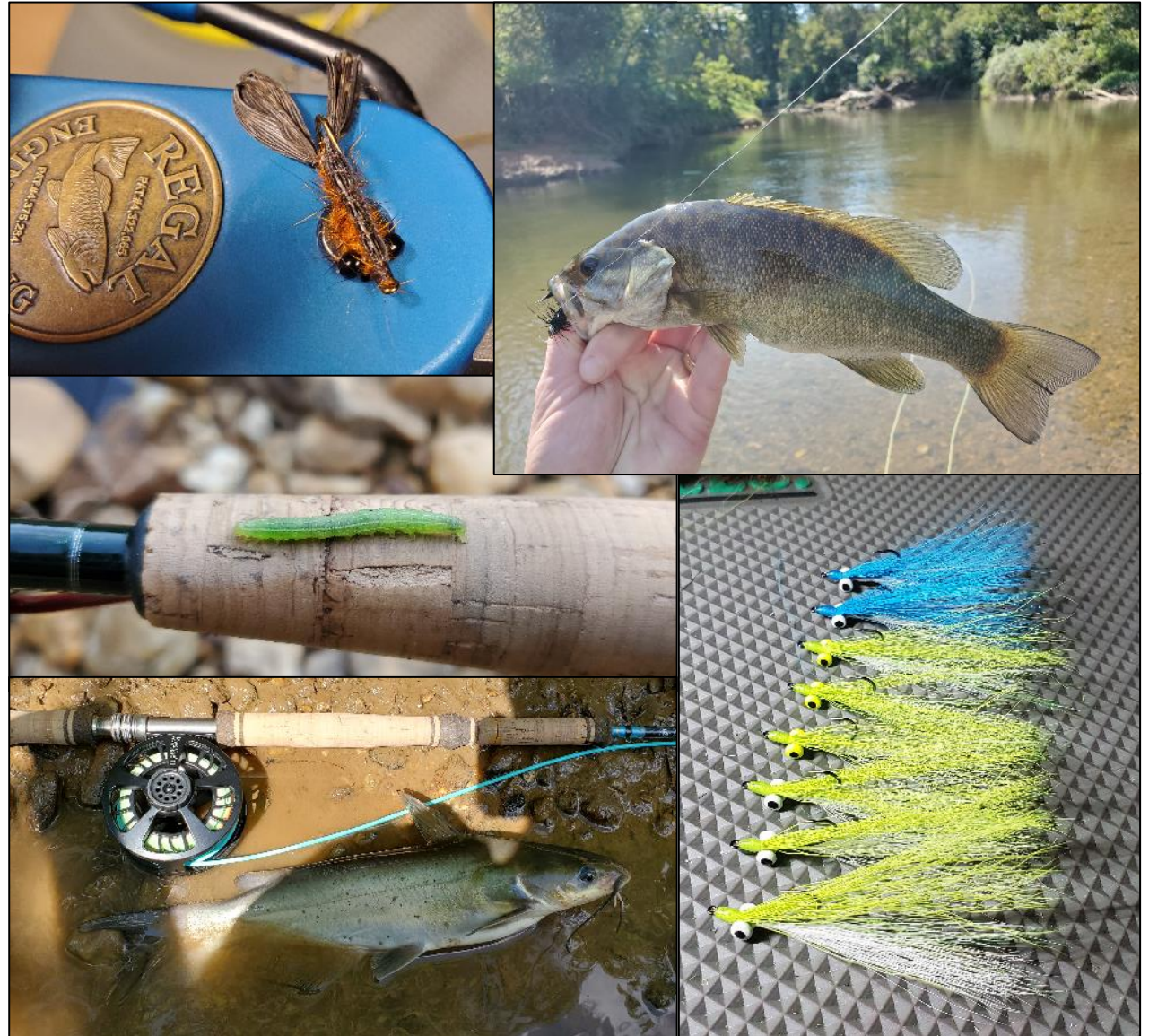


- [Why Tie Flies?](#)
- [Types of Flies](#)
- [Hooks](#)
- [Vises](#)
- [Tools](#)
- [Materials](#)
- [Threads](#)
- [Adding Weight](#)
- [Glues & Epoxies](#)
- [Organization](#)
- [General Tips](#)
- [2021 SVTU Fly Tying](#)

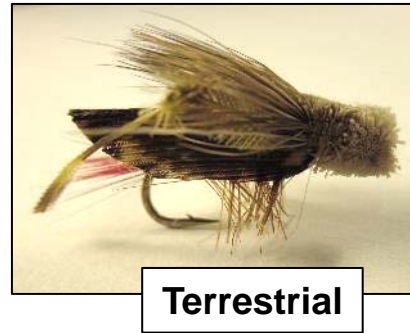
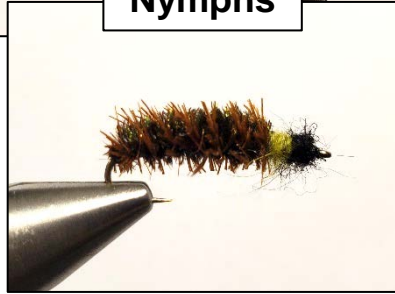
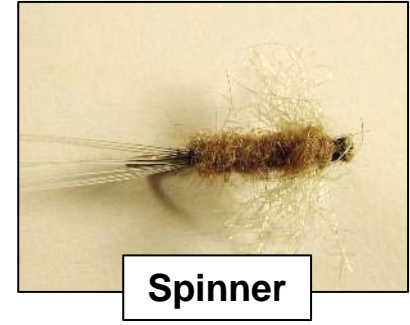
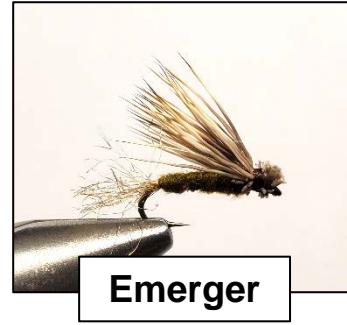
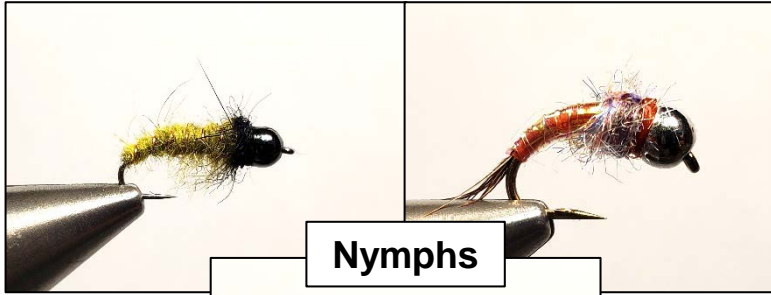


Why Tie Flies?

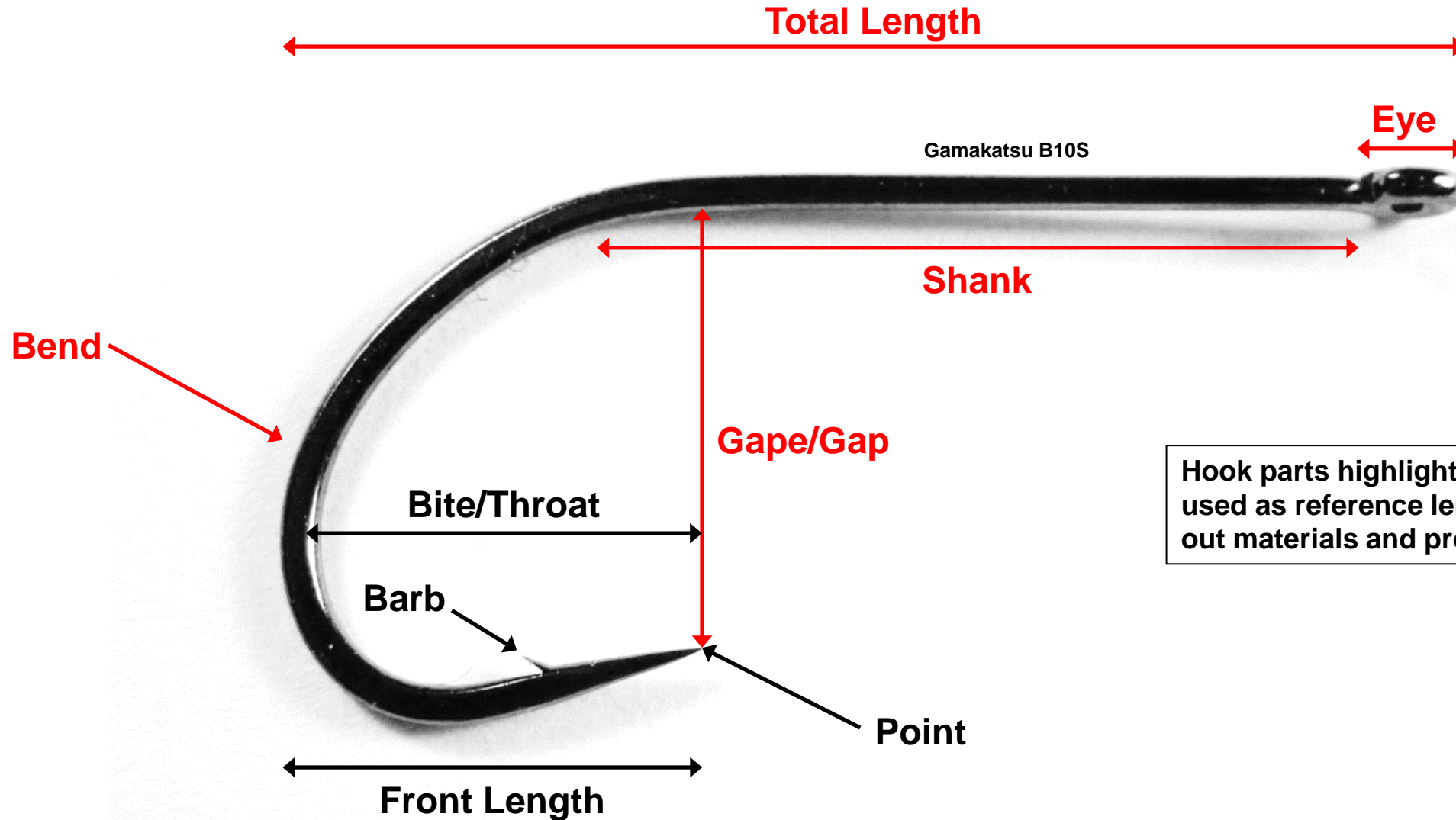
- Its fun!
- Sense of pride and accomplishment catching fish on a fly you tied yourself
- Be creative and develop your own custom fly patterns
- A great activity for the winter and “down” months to get ready for fishing season
- Fly tying is a great social activity – get together for a beer and tie some flies!
- Increased dexterity and fine motor skills



Types of Flies



Anatomy of a Hook



Hook parts highlighted in **Red** are often used as reference lengths for measuring out materials and proportions.

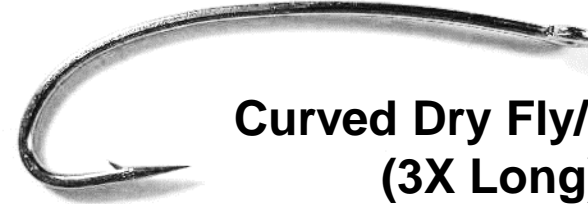
Types of Hooks



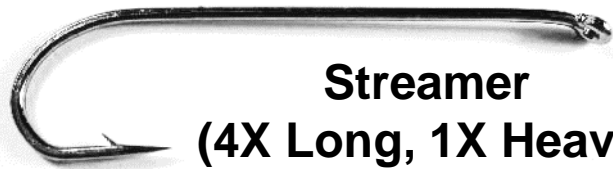
Dry Fly



**Straight Nymph/Wet Fly
(2X Heavy)**



**Curved Dry Fly/Nymph
(3X Long)**



**Streamer
(4X Long, 1X Heavy)**



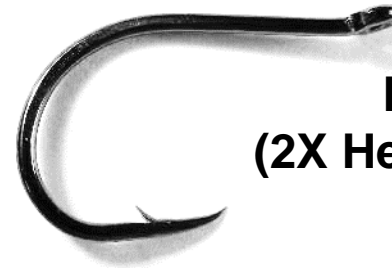
**B10S Stinger
(1X Heavy, Wide Gap)**



**Nymph Jig
(60° Bend)**

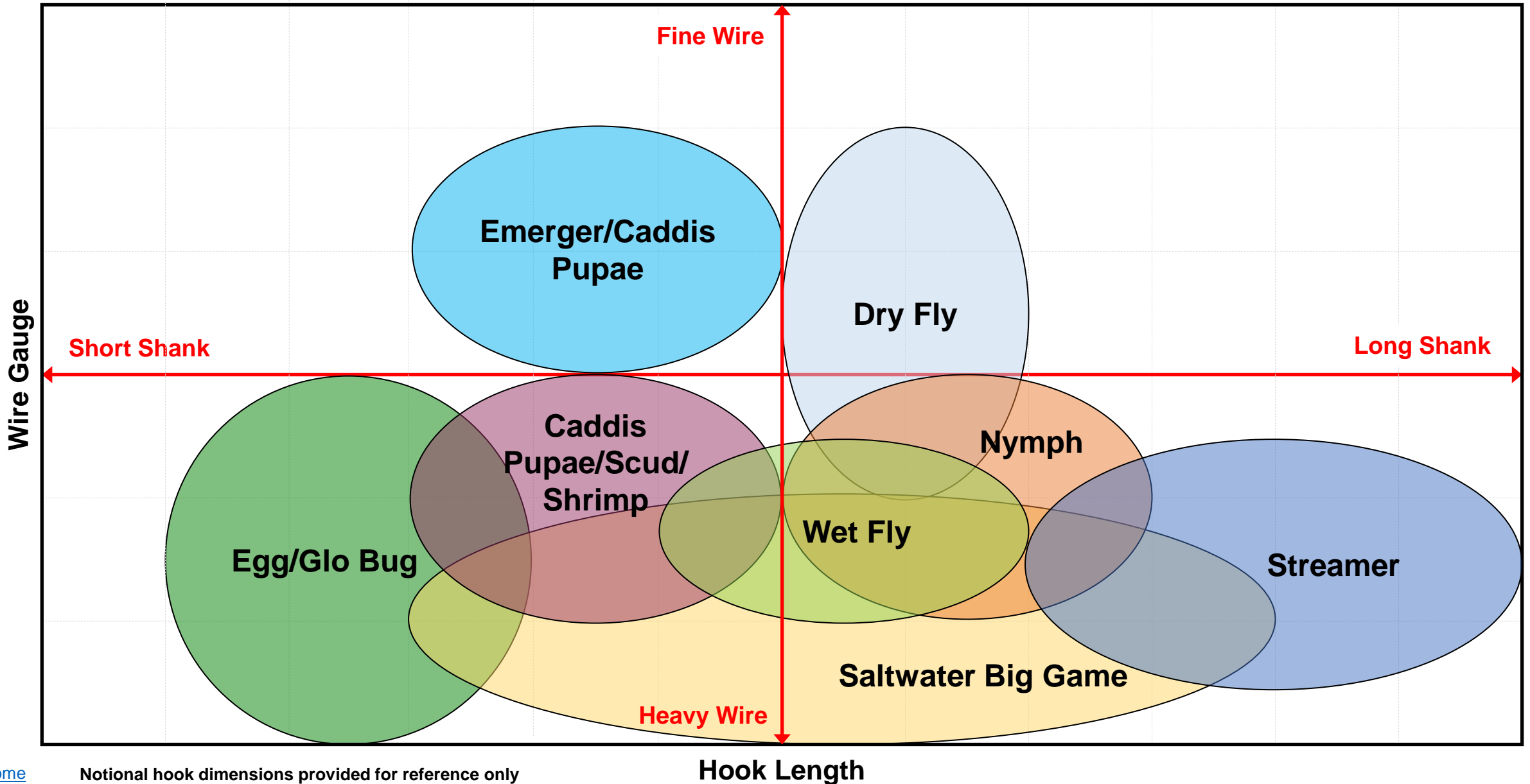
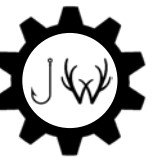


**Caddis Pupa/Scud
(2X Short, 2X Heavy, 2X Wide Gap)**



**Egg/Glo Bug
(2X Heavy, 5X Short)**

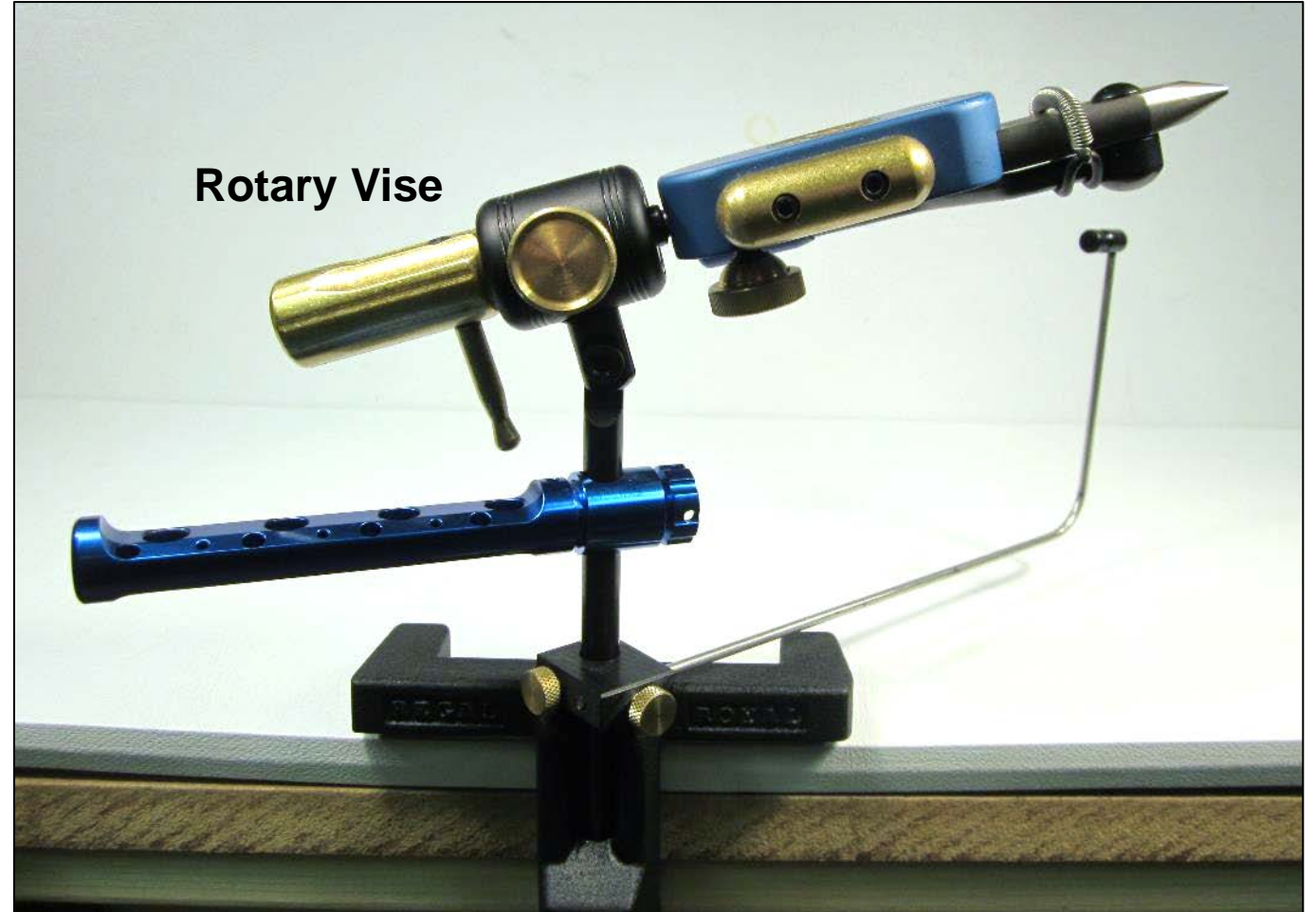
Fly Tying Hook Proportions





Fixed Head

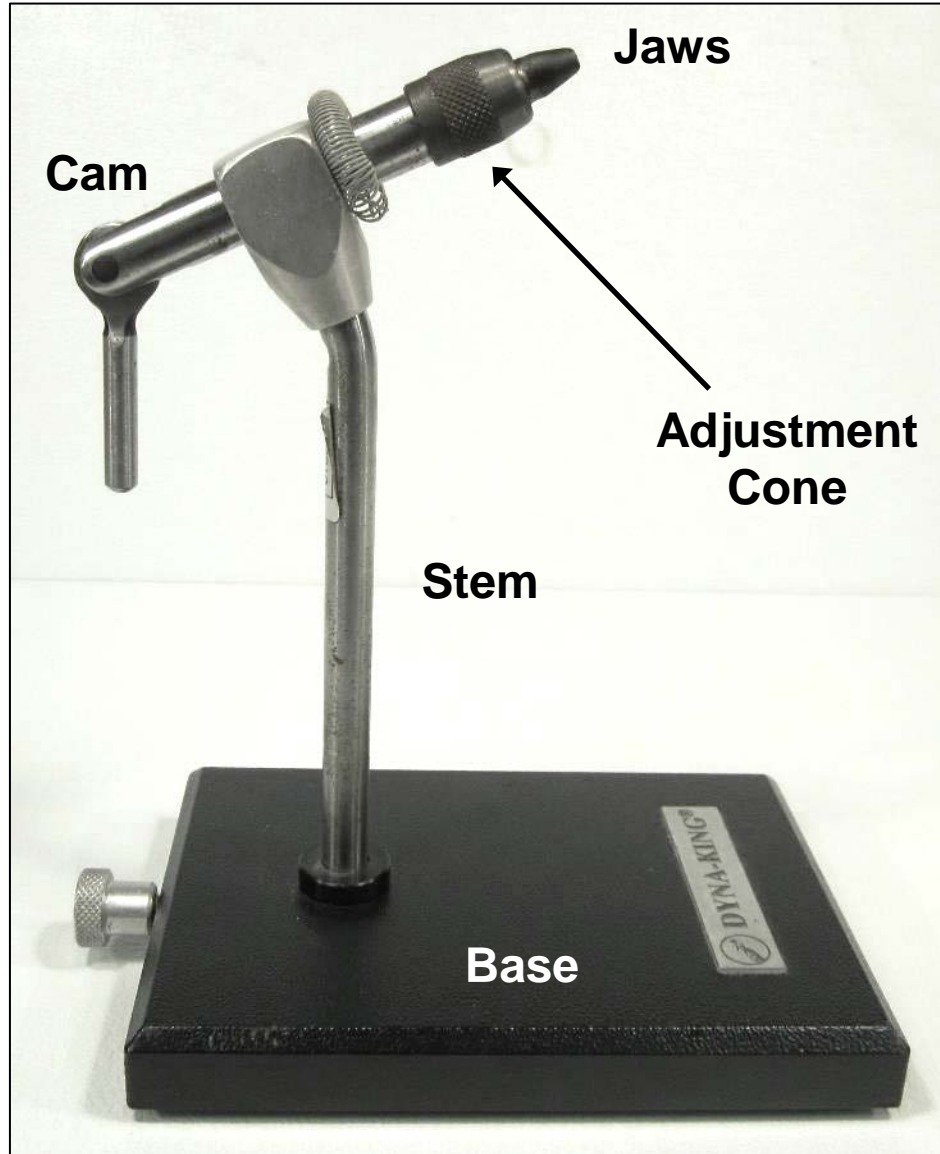
Pedestal Base



Rotary Vise

C-Clamp Base

Vise Components



Midge Jaws
Hook Sizes 10 - 32

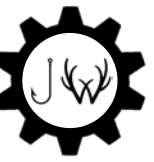


"Big Game" Jaws
Hook Sizes 8/0 - 24



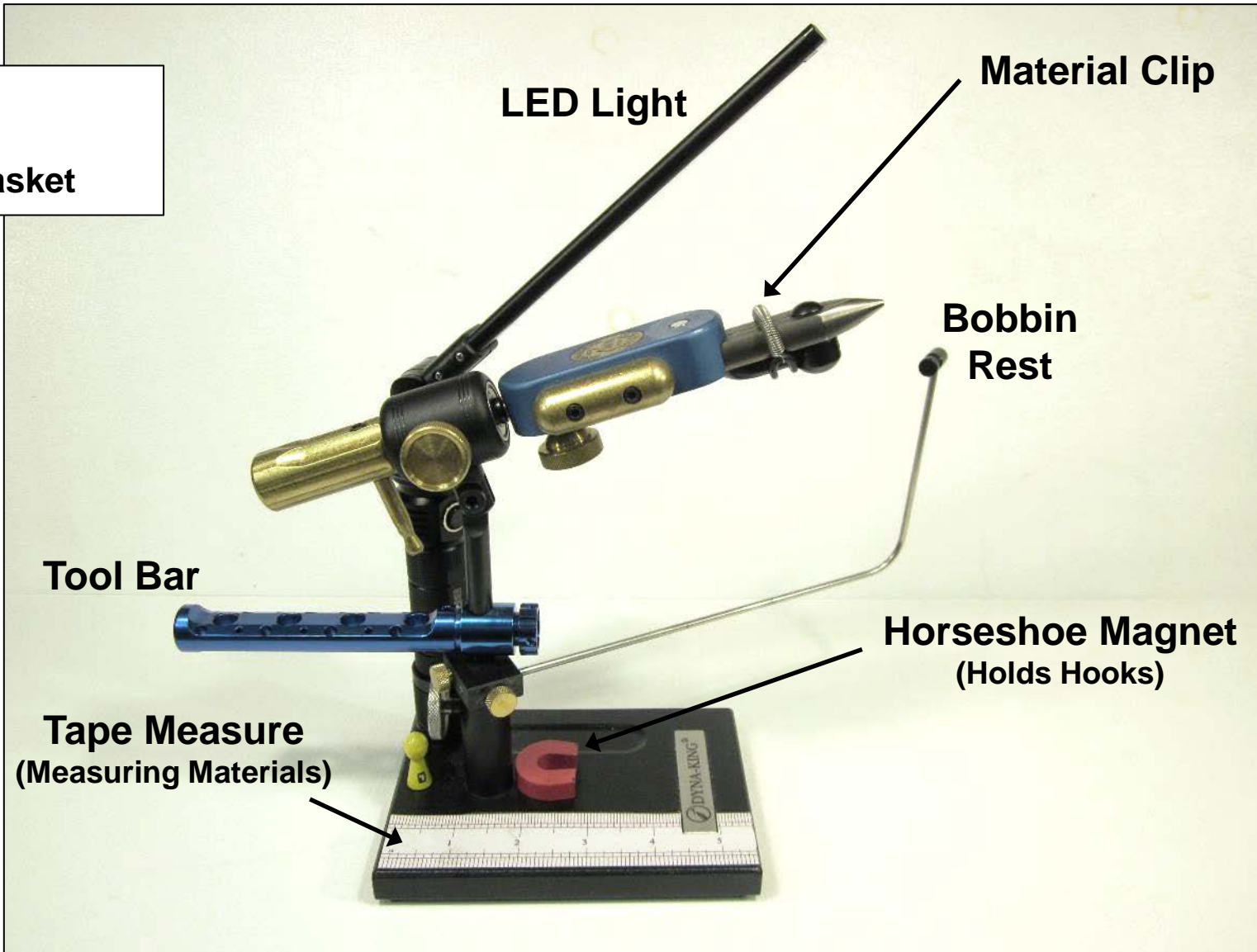
Standard Jaws
Hook Sizes 6 - 32

Vise Accessories



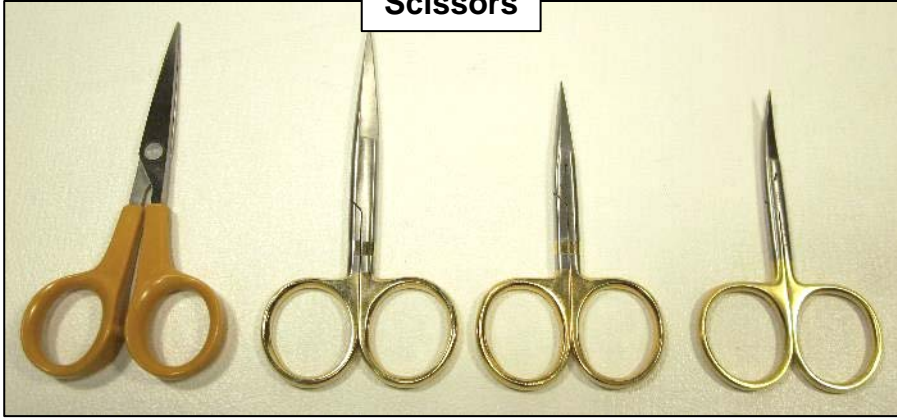
Other Accessories

- Hackle Gauge
- Material Waste Basket



Fly Tying Tools

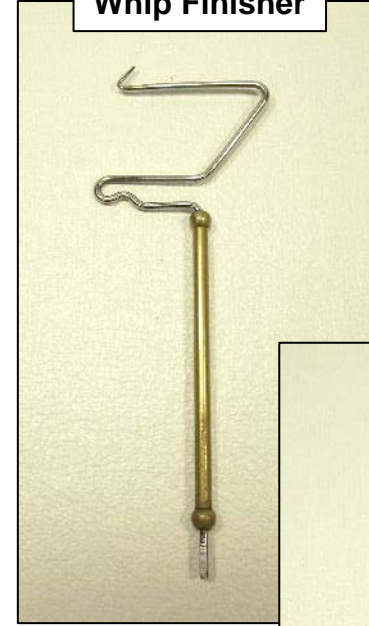
Scissors



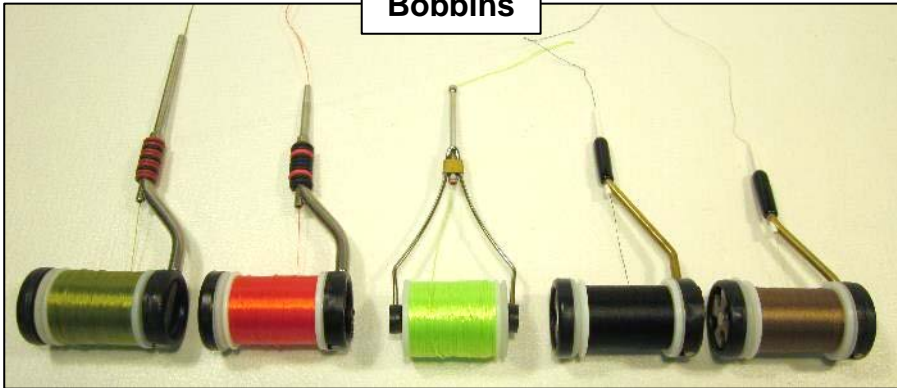
Hair Stackers



Whip Finisher



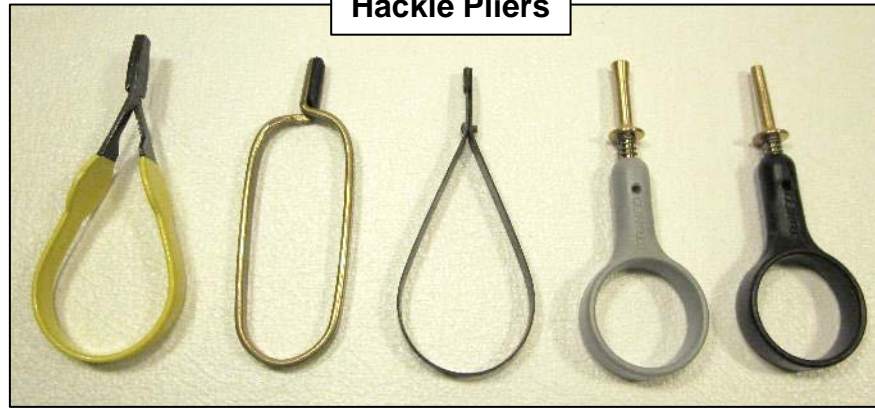
Bobbins



Bodkin



Hackle Pliers



Bobbin
Threader

- Bead Tweezers
- Bead Pad
- Tying Mat
- Side Cutters
- Needle Nose Pliers
- Dubbing Wax
- Dubbing Brush
- Dubbing Loop Spinner
- Dubbing Brush Spinner
- Combs
- Material Clips
- Material Prep Station
- Razor Blades
- Thread Splitter
- X-Acto Knife
- Sharpie Markers
- UV Flashlight
- Rotating Fly Dryer
- Small Bowl of Water
- Bic Lighter

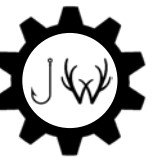
- [Feathers](#)
- [Hackles](#)
- [Hair & Fur](#)
- [Dubbing](#)
- [Chenille](#)
- [Flash](#)
- [Synthetic Fibers](#)
- [Ribbing & Spooled Materials](#)



- Variety of Uses
 - Nymphs, dries, wets & streamers
 - Tails
 - Bodies
 - Wings
- Dyed & Natural
- Source Birds
 - Chicken
 - Duck
 - Ostrich
 - Peacock
 - Pheasant
 - Turkey



Hackle & Schlappen



Rooster Neck/Cape – Best suited for dry fly hackles

Saddle Hackle – For buggers and streamer wings, high-quality rooster saddles can be used for dries

Hen Back – Short webby feathers ideal for wet flies

Schlappen – Long webby feathers ideal for palmering or wings on streamers

Hackle graded
according to
feather quality &
consistency

Half-Necks
Available



Hair & Fur

Natural animal hair and fur has a wide range of applications

- Deer, elk & moose hair is hollow and provides bounciness for dry fly wings
- Wool & fleece often used for streamer heads and wings
- Rabbit fur strips provides great action in the water when used for streamers



Tons of dubbing options

- Mainly used for building bodies of flies
- Natural vs. Synthetic
 - Blends are also available
- Coarse vs. Fine
- Tons of color options
- Sold in individual packets
- Dubbing boxes offer great value with 12 colors



Wide variety of chenille options

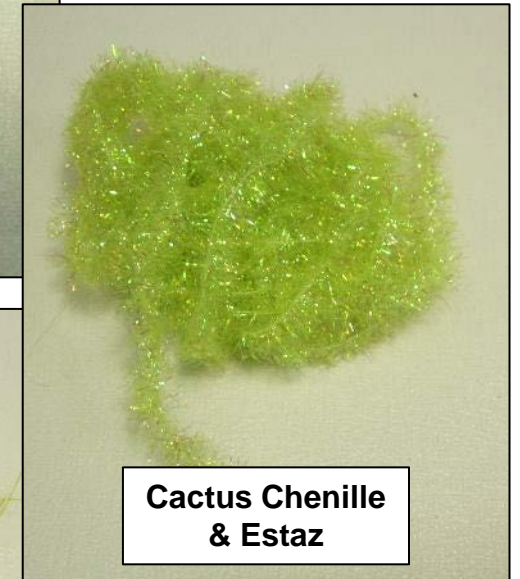
- Mainly used for building bodies of streamers
- Synthetic materials bound to rope/core
- Comes either on card or loose in package
- Fiber length ranges from < 1 mm to > 1 in.
- Great for Woolly Buggers, San Juan Worms, baitfish streamer bodies, and leech patterns



Rayon Chenille

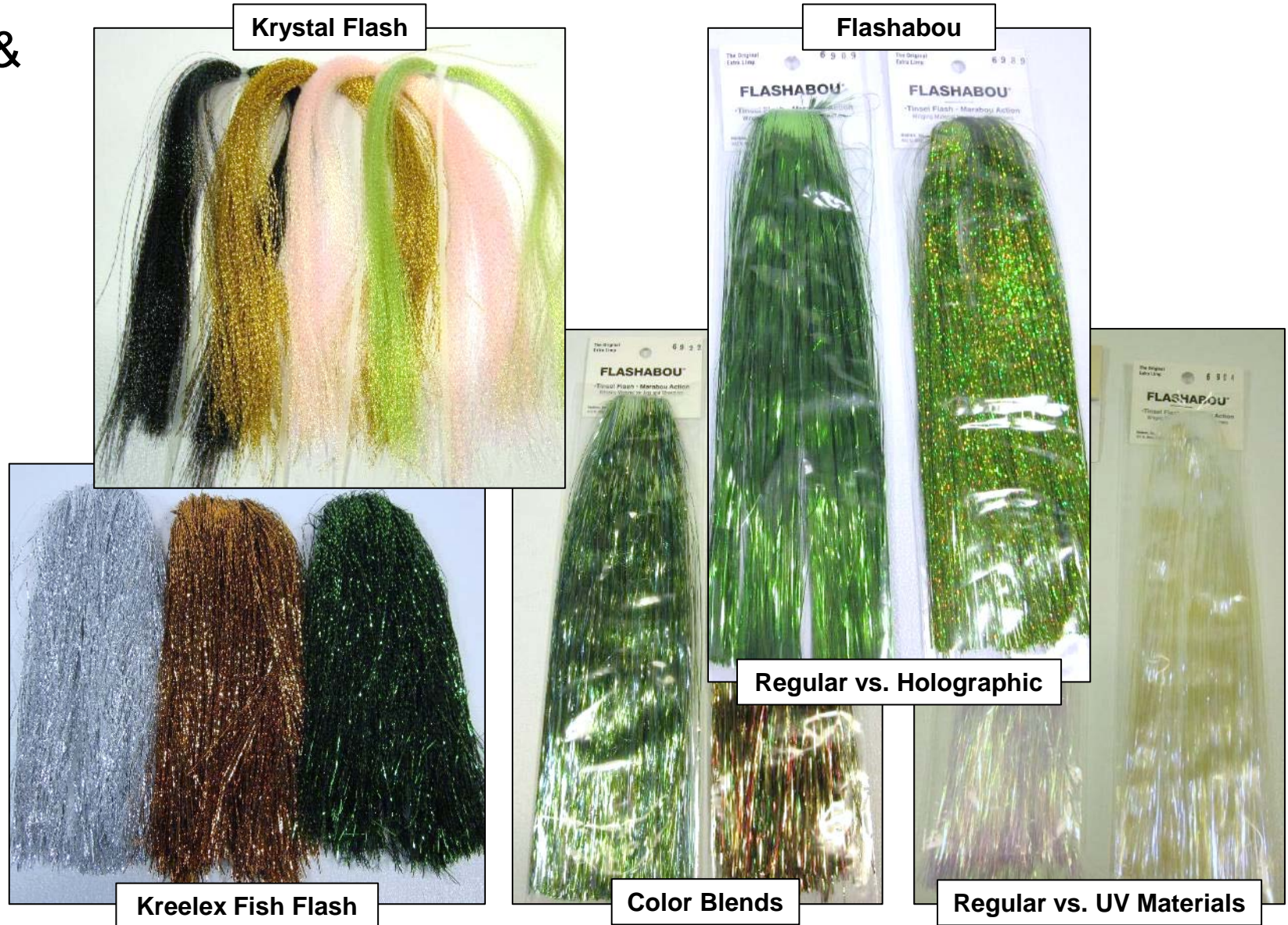


Polar Chenille



Cactus Chenille
& Estaz

- Great for adding sparkle & flash to buggers, streamers, and even nymphs!
- Tons of material options
 - Colors & Color Blends
 - Width/Thickness
 - Stiff vs. Limp
 - Visual Effects
 - Holographic & Mirage
 - Barring & Speckled
 - UV & Glow in the Dark
 - Textures
 - Flat
 - Crinkled



Synthetic Fibers

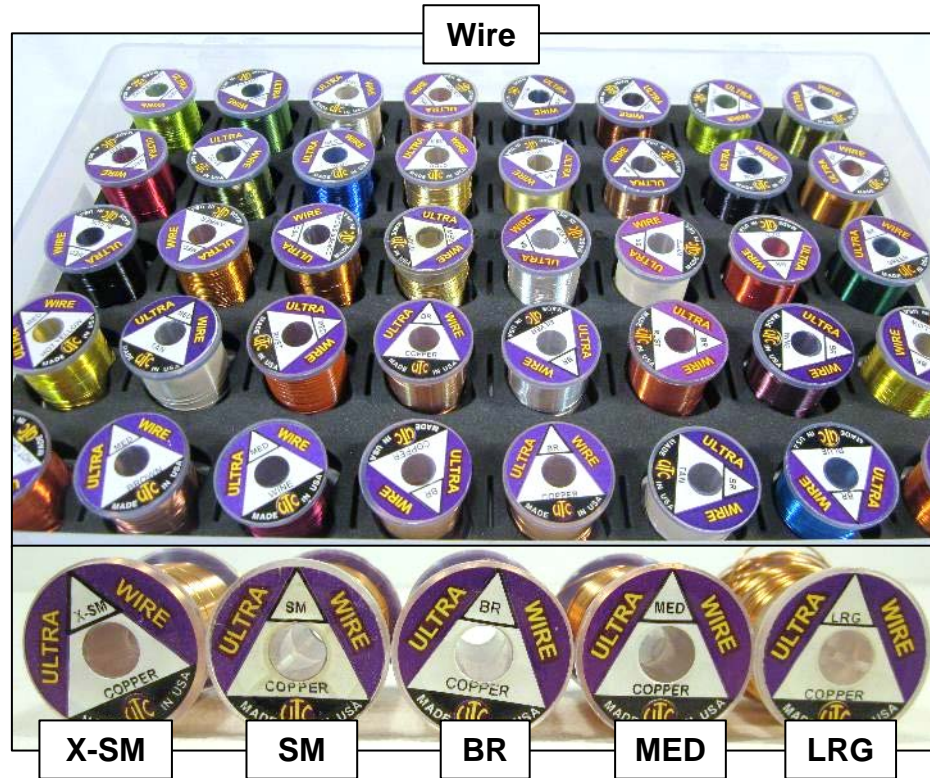
- Designed to be used in place of natural materials like bucktail and wool
- Mainly used for building bodies, heads, and wings on streamers
- Synthetic fibers do not absorb moisture and shed water on your backcast
- Synthetic fibers can create the impression of bulk with less weight than natural materials



Ribbing & Spooled Materials



- Typically offered in different sizes/diameters
- Wire ribbing used to create segmented bodies and add durability to flies
- Floss used for building colored bodies
- Tinsel used to add flash or holographic effects
- Vinyl ribbing used to create segmented bodies
- Specialty materials can replace dubbing and other traditional tying materials



Wire Size	Diameter Gauge	(in.)
X-Small	38	0.0040
Small	34	0.0063
Brassie	32	0.0080
Medium	28	0.0126
Large	26	0.0180



- Thread Size Designations

- *Denier – Standard sizes range from 50 to 240 denier
- Aught – Standard sizes range from 3/0 to 12/0

- Colors

- Standard Colors: Black, Tan, Olive, Gray, Red, White**
- Available color variety can be dependent on thread material type

- Materials – Tradeoffs with different materials

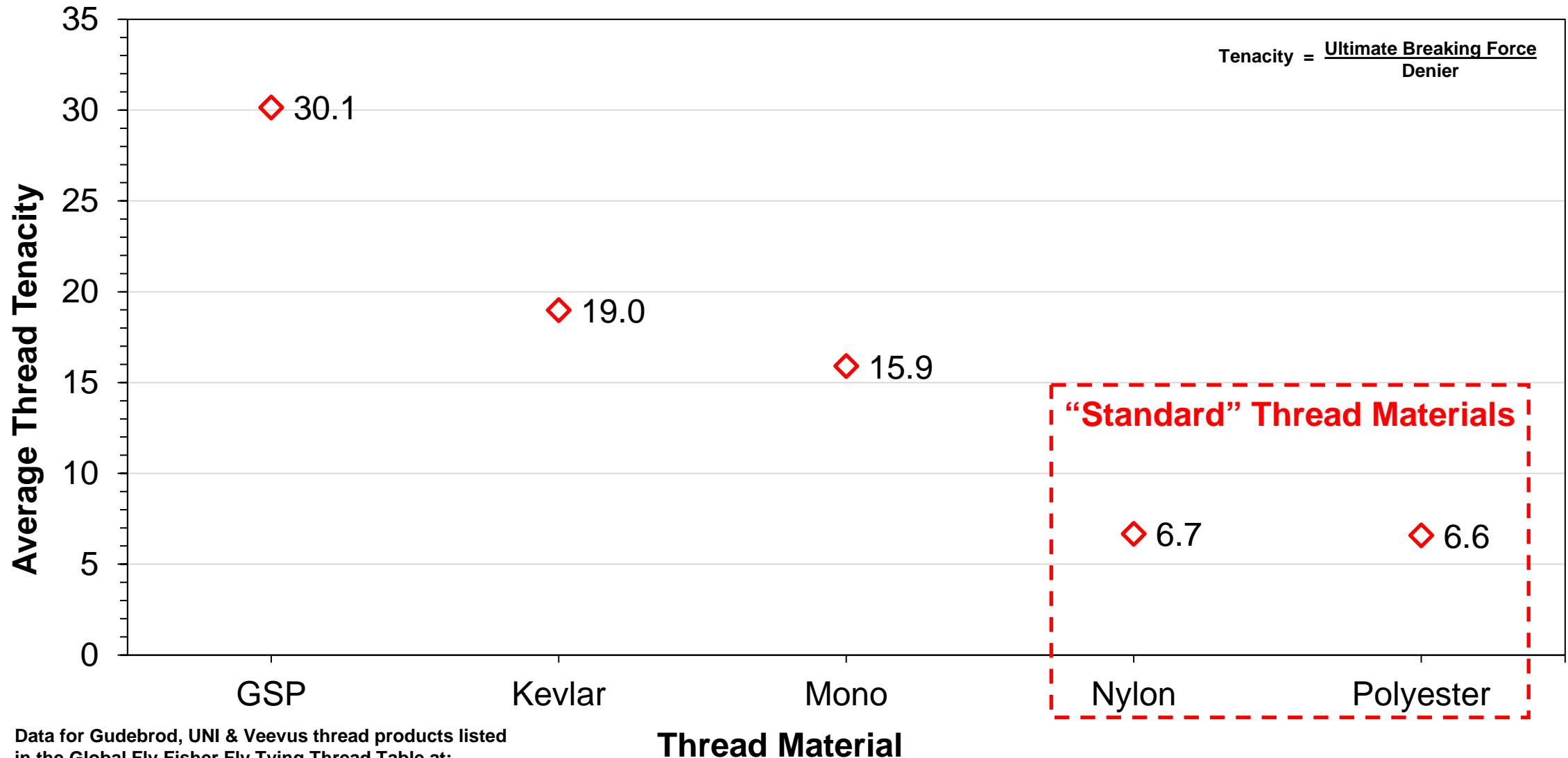
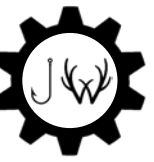
- Polyester
- Nylon
- Mono
- Kevlar
- Silk
- GSP

Aught Size	Approximate Denier
1/0	600D
3/0	180D
6/0	100D
8/0	70D
10/0	60D
12/0	50D
14/0	40D
16/0	35D
18/0	30D



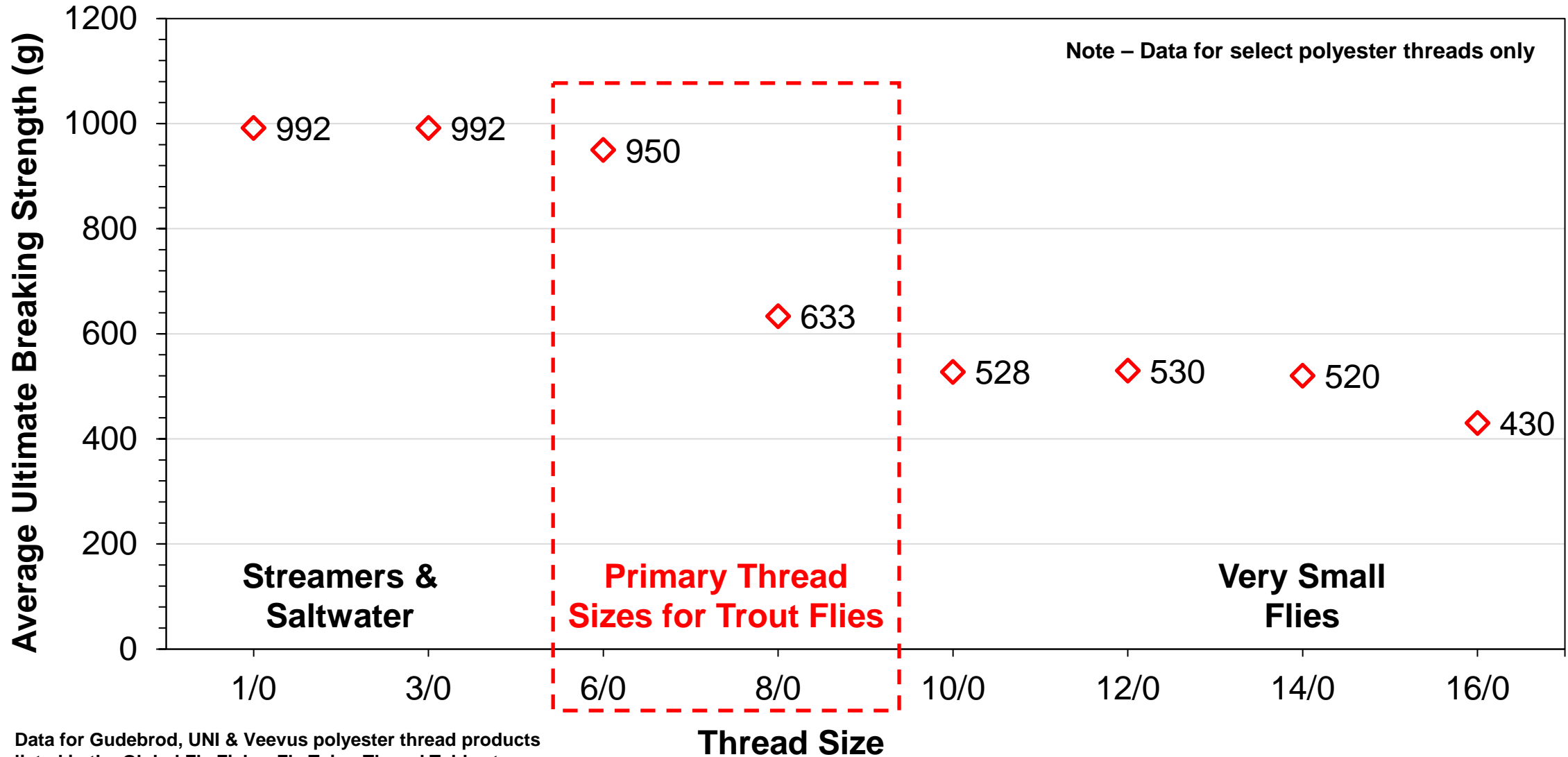
*Denier is defined as the weight in grams per 9000 meters of thread. Denier is based off the weight of silk, i.e. 9000 meters of silk weighs 1 gram.

Thread Material vs. Breaking Strength



Data for Gudebrod, UNI & Veevus thread products listed in the Global Fly Fisher Fly Tying Thread Table at: globalflyfisher.com/tie-better/fly-tying-thread-table

Thread Size vs. Breaking Strength



Data for Gudebrod, UNI & Veevus polyester thread products listed in the Global Fly Fisher Fly Tying Thread Table at: globalflyfisher.com/tie-better/fly-tying-thread-table

Adding Weight to Flies



Dumbbell

Barbell

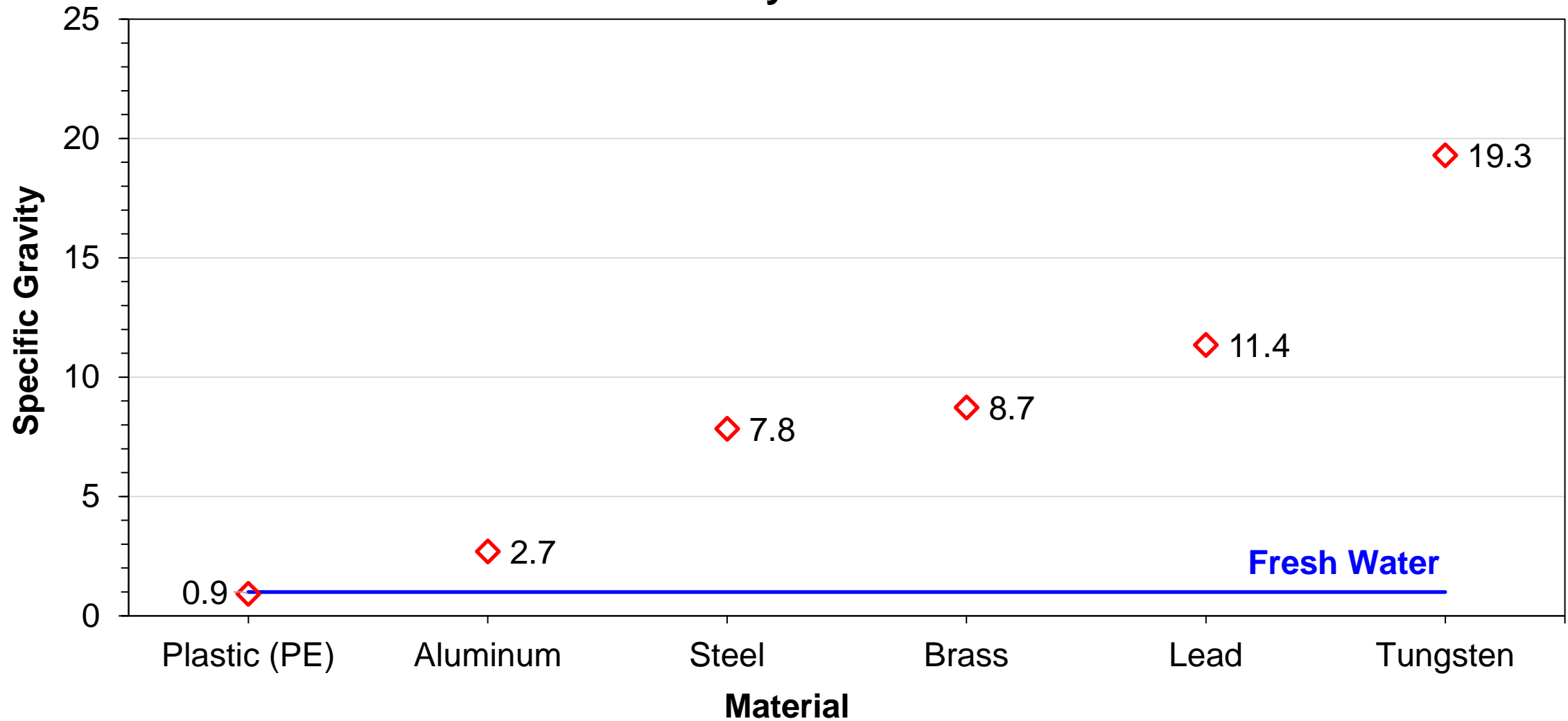
Hourglass

Aluminum Sea Eyes

Bead Chain

Googly

Relative Density vs. Fresh Water



Glues & Epoxies

- Common head cement materials include nail polish, varnish & 5 minute epoxy
- Newer materials include UV epoxies and environmentally friendly head cements
- Color pigments, glitter/sparkle & UV additives can be added to epoxies



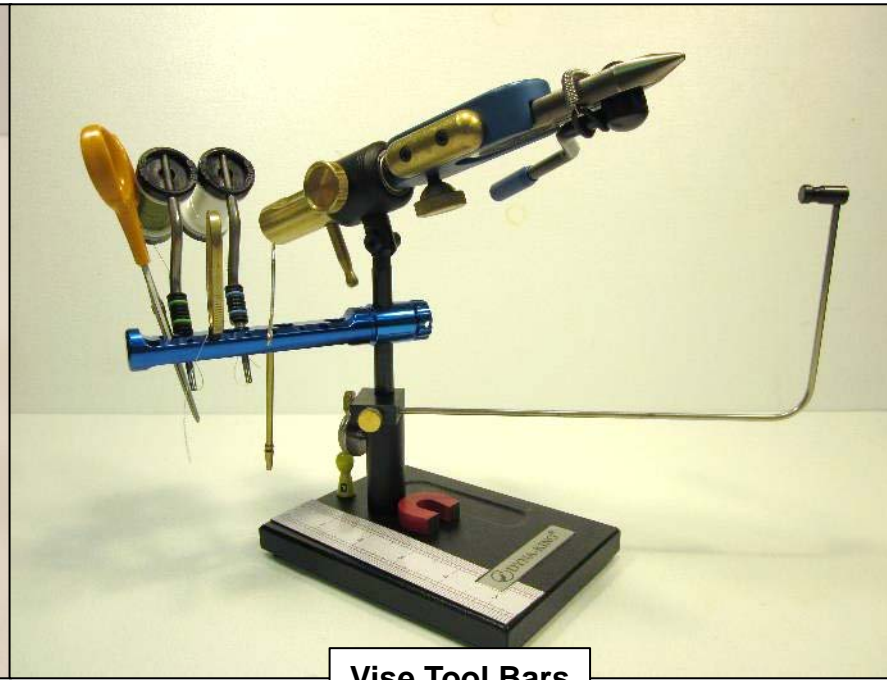
- Everyone organizes their materials differently
- Try different storage options to find what works best for you
- Watch YouTube videos or read articles online



- Many great tool organization options available
 - Tool Caddies
 - Vise-mounted tool bars
 - Custom wood and desktop tool organizers



Tool Caddy

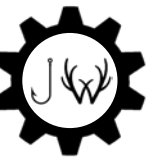


Vise Tool Bars



Be Creative!

Thread, Wire & Spools



- Spooled materials accumulate quickly
- Plastic storage boxes with dividers are a great option for neat storage
- Spool racks keep often used materials quickly accessible



Beads, Hooks & Flies



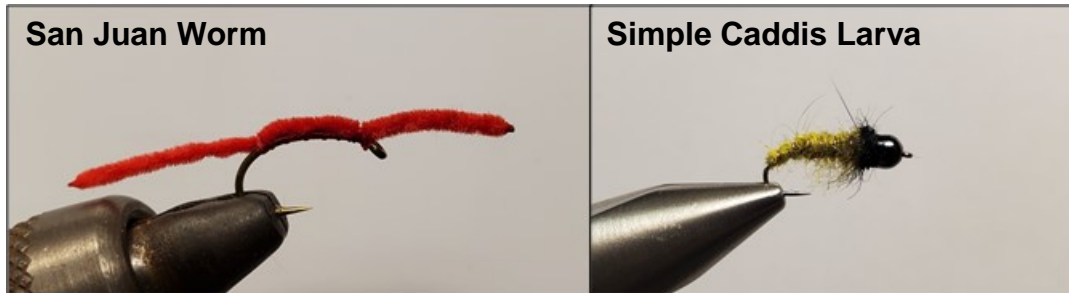
- Hook & bead organizer boxes offer tight seals and rounded corners for easy and secure access
- Plastic storage boxes with dividers are a great to store flies waiting for their turn to hit the water



General Tying Tips

- Fly tying books and YouTube/instructional videos are an incredible resource
- A quality vise (doesn't need to be expensive) is the most important tool
- Always wrap your thread in the same direction. Pick a direction and stick to it!
 - Typical method is clockwise (when viewed from front) for RH tyer, counter-clockwise for LH
- Tying 6+ flies of the same recipe at a sitting will help to develop consistency
- Don't crowd the hook eye
- Less is typically more when it comes to dubbing
- Never use your good tying scissors to cut wire or other hard materials
- Look for materials that can be used to tie many different patterns
- Check out fly shop "bargain bins" and fly tying trade shows for deals on materials
- Look for fly tying tools and materials from household products to save money

February 1st – Fly Tying 101



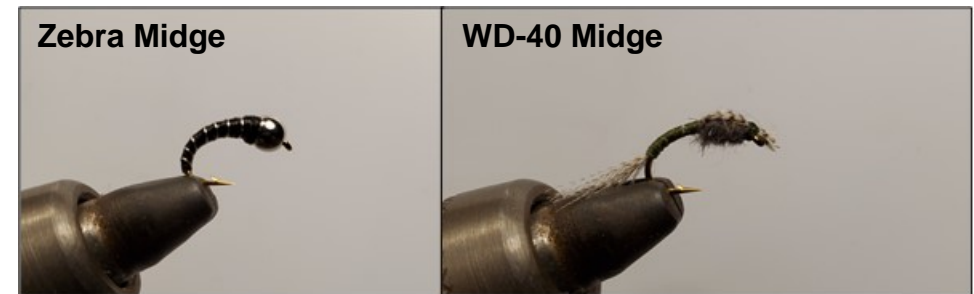
March 15th – Streamers



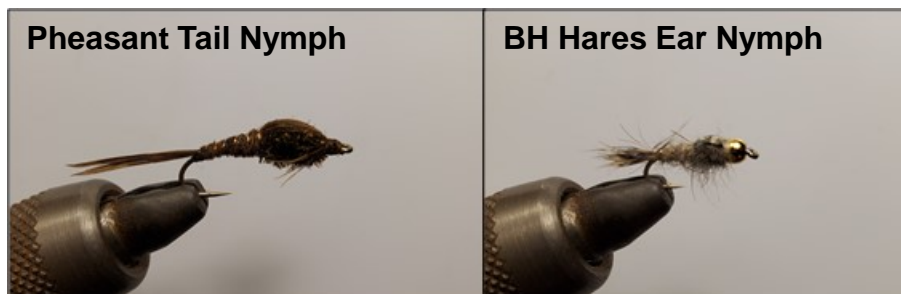
February 15th – Soft Hackle Wet Flies



March 29th – Midges



March 1st – Nymphs



April 19th – Dry Flies

