Leaders and Furled Leader Construction

Judson Walls—Rapidan TU

March 1, 2014
Leaders—The link from the fly line to fly

- Fly lines provide the energy to cast the fly
- Leaders transfer energy from the fly line to the fly
  - Goal is to transfer as much energy as possible smoothly and evenly
- Provides control, concealment, strength/stretch and presentation
Is it leader or is it tippet?

- Energy transfer/ provides weight for casting
- Matched to Rod
- Floating/Sinking
- Variety of tapers
  - WF/DT

Fly Line

Butt/Mid Sections

- Link to fly line
- Matched to fly tippet
- Aids turnover of fly
- Stepped down in diameter/strength
- Strength
- Floating/sinking
- Changed less often during outing
- Buy vs build

- Butt section=60%
- Mid Section=20%

Tippet

- Link to fly--Terminal end of leader
- Match to fly/conditions
- Aids turnover of fly
- Strength/stretch
- Stepped down in diameter/strength
- Presentation
- Floating/Sinking
- Changed/added often

- Tippet section=20%
Leader segments

- **Butt section**—Should be matched to fly line
- **Mid section**—Steps down from butt section to tippet
- **Tippet section**
  - Ideally a sequential step down (1X-2X-3X-4X-etc.)
    - Can go two X steps (1X-3X-5X)
  - Matched to fly (hook) size and conditions
    - Hook size divided by 3 = Final tippet size
    - 1 size “X” above or below
    - Example: Size 12 Fly—12/3=4x Tippet (Can go to 3X or 5X tippet)
- **Leader length rule of thumb**—1-1.5 x rod length
  - Clear water and spooky fish and fishing conditions
Leader construction

• **Materials**
  - Silk/Thread
  - Monofilament

• **Methods**
  - **Knotless**—single, continuous, decreasing diameter (lb. strength) material from the butt to the tippet
    • Most commonly available for purchase--$4-5 each
    • Lots of memory—must straighten
  - **Knotted**—sections of decreasing diameter level mono connected by knots
    • Can be purchased commercially
    • Comparable in price to knotless leaders
    • Can be made for considerably less—Pennies vs. dollars
# Knotted leader build formulas

**LeaderCalc** available for download from:


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<thead>
<tr>
<th>Weight</th>
<th>Length</th>
<th>Tippet Diameter</th>
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<td>6 LB</td>
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<tr>
<td>1 LB</td>
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<td>0.5 LB</td>
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<td>0.125 LB</td>
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<td>0.0625 LB</td>
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**9.0 Foot Leaders**

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**Walls Light Trout 5X**

**Dry Fly**

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<th>Recommended Hook Size</th>
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<tr>
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**Foot**

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<th>5X - 0.006 in</th>
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**Formula Description**

30-20 lb, 7-15 lb, 7-12 lb, 7-10 lb, 7-8 lb, 6-3X, 8-4X, 8-5X

**Formula Notes**

Hand Tied by Judson E. Walls

Tied: 06/17/2010  Good Until: 06/16/2011
Leader construction cont.

• Methods cont.
  - Braided
    • Hollow core
    • Level taper
    • Apparently spray significant water during false cast
  - Furled
    • One continuous length of thread/mono
      - Gradual step-down from thick to thin
    • Available for purchase—about $15
    • Can be made for about $1 and about 15 minutes
    • Outstanding turnover of fly
    • Can be difficult to control in windy conditions
    • No memory
Furled leader jig and graphic

**Note:** The furled leader represents the butt and mid-sections of the leader. Tippet is added to complete the leader.

Taper is achieved by reduced number of strands between each post

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Claude W. Frener
Lake Ridge, VA
frener@gl.net
Shorb Knot to Finish
Leader construction cont.

- **Furled**
  - One continuous length of thread/mono
    - Gradual step-down from thick to thin
  - Available for purchase—about $15
  - Can be made for about $1 and about 15 minutes
  - Outstanding turnover of fly
  - Very accurate

- Can be difficult to control in windy conditions
- No memory
Knots for your leader segments

• Knots are another “preference” area

• Considerations:
  - Knot Strength
    • Knots can break before the line/tippet does
  - Bulk
    • Knots can get caught in guides—particular problem with long leaders
  - Simplicity
    • You may need to retie your knots on the stream—simple is best
    • Can you tie it in the cold?
Some key knots

- **Perfection Knot**—Fly line to leader connection—loop to loop
- **Nail Knot**—Fly line to leader connection
- **Needle Knot**—Fly line to leader connection
- **Blood Knot**—Butt and mid segment connections
- **Surgeon's Knot**—Mid section to tippet and tippet segments
- **Some “Sliced Bread”**
  - **Knotless Connections**—Flyline to Leader connection
  - **Davy Knot**—Tippet to Fly connection
Connecting leaders to fly line

- Many fly lines come with built in loops
  - Makes a loop-to-loop connection easy
  - With a loop, Perfection Knot in leader is typically recommended
  - Failure of loop occurs when the biggest fish of your life is hooked
- Nail Knot effective, but can be bulky
- Needle Knot more complex, but smoother approach
- Consider something like a Loon Knot Sensor to smooth the transitions
Key knot pictures

**Perfection Loop**—Flyline to leader
Loop-to-Loop

**Blood Knot**—Leader butt sections

**Needle Knot**—Fly line to leader

**Nail Knot**—Fly line to leader

**Surgeon's Knot**—Leader tippet sections
Some “sliced bread”

Dave Whitlock's Knotless Connection
Fly line to leader

The Davy Knot
Tippet to fly
What works best?

• Whatever works for you

• If buying, select according to your fishing style, rod/line, and skills

• Building your own is inexpensive and enjoyable
  - Allows you to tailor to your rod/line, style, skills and conditions
Sources of info

- **Fishing knots**
  - http://www.flyfishingconnection.com/knots.html
  - http://www.flyanglersonline.com/begin/knots/

- **Davy knot**

- **Leader formula**
  - http://www.flyfishusa.com/tackle-tips/leaders/about-leaders.html

- **LeaderCalc download**

- **Trout University**
  - http://www.troutu.com/

- **Dave Whitlock’s Knotless Connection Kit**
  - http://davewhitlock.com/store.htm