

# OSPREY/PHOENIX





The silent, hard-hitting Oneida Eagle bows give hunters the power and impact energy of a compound bow to take down big game, with the silky smooth, constant draw and feel of a traditional recurve. Powered by Oneida Eagle's precision cam and lever system, these bows deliver when that monster buck walks into shooting range. Giving hardcore bowhunters a unique combination of precision and performance in the field, the smooth shooting, natural-pointing Oneida Eagle bows deliver a high-performance bowhunting experience like no other.

Congratulations and welcome to the family! As an owner of an Oneida Eagle Bow, you are now a member of a proud and growing brotherhood who enjoys shooting one of the smoothest performance bows available to archers today.

Oneida Eagle builds its bows to provide (with proper care and maintenance) years of enjoyable, accurate shooting, and dependable service. Please read this entire manual carefully before you shoot your bow. This manual provides step-by-step instruction on how to properly set up and adjust your new bow to obtain and maintain maximum performance.

## **TABLE OF CONTENTS**

| Wel | come to Oneida Eagle Bows          |
|-----|------------------------------------|
|     | Warranty                           |
|     | General Operating Instructions     |
|     | Bow Maintenance                    |
|     | Safety 3                           |
| Get | ting to Know Your Oneida Eagle Bow |
|     | Bow Parts Diagram (PHOENIX)        |
|     | Bow Parts Diagram (OSPREY)         |
| Set | ting Up Your Bow                   |
|     | Measure Your Draw Length           |
|     | Draw Weight Adjustment             |
|     | Measuring and Adjusting Tiller     |
|     | Brace Height                       |
|     | Module System                      |
|     | Changing Modules                   |
|     | Module Chart                       |
|     | Timing Cable Tension (Take up)     |
|     | Supression System                  |
|     | Cable Maintenance                  |
|     |                                    |
|     | Simple Maintenance Indicators      |
|     | Bow String Replacement             |
|     | Oneida Eagle Bows Chart            |
|     |                                    |

# IMPORTANT – KEEP THIS BOOKLET. CAREFULLY READ ALL INSTRUCTIONS IN THIS MANUAL BEFORE USING YOUR NEW ONEIDA EAGLE BOW.

#### **RECORD FOR FUTURE REFERENCE**

Thank you for buying a top quality Oneida Eagle Bow. Here at Oneida Eagle Bows, we combine innovative technology with quality materials to offer high-performance bows you can be proud to own. Made with pride using American-made parts and materials, your Oneida bow is built to provide years of enjoyment and dependable service with proper care and maintenance.

| Oneida Bow Item # | Serial Number |        |       |
|-------------------|---------------|--------|-------|
| Draw Length       | Draw Weight   | String | Color |

### **ONEIDA EAGLE BOWS WARRANTY**

#### **IMPORTANT!**

#### WARRANTY REGISTRATION – TO ACTIVATE YOUR BOW WARRANTY, BOW REGISTRATION MUST BE RECEIVED WITHIN 30 DAYS OF PURCHASE. REGISTER YOUR BOW ONLINE AT www.oneidaeaglebows.com

# THE SERIAL NUMBER IS LOCATED ON THE LABEL ON THE POWER LIMB AND ALSO ENGRAVED ON THE RISER UNDER THE HAND GRIP.

#### **ONEIDA EAGLE BOWS LIMITED LIFETIME WARRANTY**

Warranty repairs are our top priority. Each bow has a unique serial number which will be required along with the original owner's first and last name to obtain warranty service. Should you ever need repairs, consult your nearest Authorized Oneida Eagle Bows Dealer. They are very knowledgeable about our bows and will walk you through your repair process, if necessary, contacting Oneida Eagle Bows for assistance on your behalf. Please note: Authorized Oneida Eagle Bows Dealers may charge for service work that accompanies warranty fulfillment. All Oneida Eagle Bows must be registered through the Oneida Eagle Bows Warranty Registration to activate all warranties. Oneida Eagle Bows cannot be held responsible for injury or product failure resulting from improper use or neglect of maintenance. Always wear safety glasses when shooting a bow. Oneida Eagle Bows recommends all bows undergo string and cable changes every 5000 shots or every 12 months, whichever first occurs, to maintain Oneida Eagle Bows warranty coverage. Total arrow weight must be in accordance with the guidelines published by the Archery Trade Association (ATA) for minimum arrow weight/bow peak weight. Overstressing Oneida Eagle Bows by using arrows lighter than ATA guideline will void our warranty and may cause damage to the bow or injury to the shooter. Oneida Eagle Bows specifications on strings must be adhered to.

#### LIMITED LIFETIME WARRANTY

Your Oneida Eagle Bow is warranted against defects in materials and workmanship to the original, registered owner when purchased at an authorized dealer, for the life of the original owner. This includes all bow parts except the string, cables, modules, and cosmetic appearance (chips, dings, scratches) caused by normal use and wear. Oneida's sole and exclusive responsibility and your exclusive remedy is limited to Oneida or its authorized dealer repairing, or if repair is impractical, replacing or providing credit. ALL Oneida Eagle Bow Accessories have a 1 year warranty for defects in materials and workmanship.

#### LIMITATION OF LIABILITY

SEINE OUTDOOR HOLDINGS, LLC. dba/ONEIDA EAGLE BOWS ("ONEIDA") SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE PURCHASE, PERFORMANCE, USE, REPAIR OR REPLACEMENT OF THE PRODUCTS, INCLUDING, BUT NOT LIMITED TO, LOSS OF ANY ANTICIPATED OR ACTUAL REVENUE OR PROFITS, INTERRUPTION OF BUSINESS OR HUNTING, LOSS OF USE, OR DAMAGE TO OTHER PROPERTY OR EQUIPMENT OR DAMAGE TO REPUTATION. ALL WARRANTIES ARE VOID REGARDING ANY PRODUCT THAT HAS BEEN ALTERED IN ANY MANNER BY ANYONE OTHER THAN ONEIDA OR ITS AUTHORIZED DEALER NOR WILL ANY WARRANTY BE EFFECTIVE IF THE BOW HAS BEEN SUBJECTED TO IMPROPER HANDLING OR ASSEMBLY, OPERATION, MAINTENANCE, REPAIR, ALTERATION, MISUSE OR NEGLIGENCE. SELLER MAKES NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, WHETHER FOR MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

Note: Oneida Eagle Bows reserves the right to make substitutions on warranty coverage repair or replacement for any reason, including but not limited to available parts or custom color/camo pattern.

#### **GENERAL OPERATING INSTRUCTIONS**

• Always inspect your bow thoroughly before each shooting session to insure that it is in good working order. Check for worn, loose, or missing components and have them replaced at an authorized ONEIDA dealer as required, ie. set screws, modules, cables, etc.

• Inspect your arrows to insure that they are straight, undamaged and that each nock is in good condition. A cracked nock can break when fired from the bow and cause the bow to "dry fire" resulting in possible injury to the archer and damage to the bow. Dry-firing is drawing and releasing the bowstring without an arrow on the string.

• When purchasing arrows for your bow, consult the selection chart from the arrow manufacturer and select the correct arrow for your application. Always use an arrow that follows the ATA guidelines. Failure to do so could cause personal injury and damage to your bow.

#### **BOW MAINTENANCE**

• Your ONEIDA bow will give you many years of use if maintained and cared for properly. It is a mechanical device that is subject to wear and therefore must be inspected periodically and given the proper adjustments and service. It is recommended that this service be performed at least once a year by an authorized ONEIDA dealer. All components, including string, cables, fasteners, modules, e-clips, limbs and riser should be carefully inspected for damage or wear.

• Strings and Cables: Apply a light coat of high quality bowstring wax to your string each time you shoot your bow to reduce wear on your string. It is especially important **NOT** to wax the bow string loops that wrap around the outboard limb tip.

• Strings and cables must be replaced periodically. A worn cable or string can suddenly break causing serious injury to the archer and damage to the bow. It is recommended that the string and cables be replaced at least every 5,000 shots or 12 months. ONEIDA recommends that this work be performed by an authorized ONEIDA dealer.

• Always store your bow in a cool dry place. High temperatures, such as those that can occur in the interior of a vehicle, can cause serious damage to your bow.

- After use in high humidity or damp conditions, wipe the metal components of your bow with a light oil.
- DO NOT PUT YOUR ONEIDA BOW IN A TRADITIONAL COMPOUND BOW PRESS. DOING SO WILL DAMAGE YOUR BOW.

#### SAFETY

As with any weapon, safe operations of your ONEIDA bow must always be the highest priority. **ALWAYS WEAR SAFETY GLASSES WHEN HANDLING A BOW.** 

Do not attempt to use your bow without proper instruction. Doing so can result in serious injury.

a. NEVER DRY-FIRE YOUR BOW. Dry-firing is drawing and releasing the bowstring without an arrow on the string. Dry-firing will likely cause damage to the bow and serious injury to the archer.

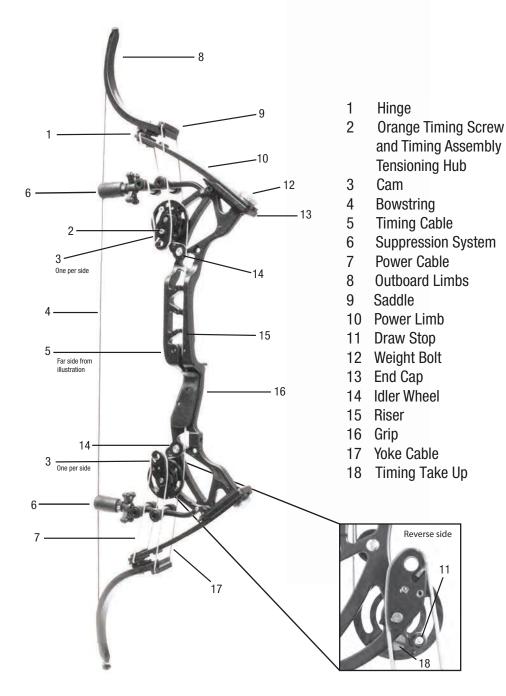
b. Always be sure of your intended target, as well as what lies behind the target area. An arrow can travel a considerable distance, so it is important to have a safe and sound backstop.

c. If you draw a bow and need to let it down, do so in a slow and careful manner. Keep your support arm straight and prepare for a rapid and violent let-down. Avoid hitting your hand on protruding accessories such as the cable guard or quiver. Keep your head and face back and out of danger during let-down. Never draw a bow with a peak weight above your comfort level. Always use a wrist sling when drawing a bow.

d. Never modify any part of the bow or its components by drilling extra holes or removing material. This voids the warranty and presents safety problems.

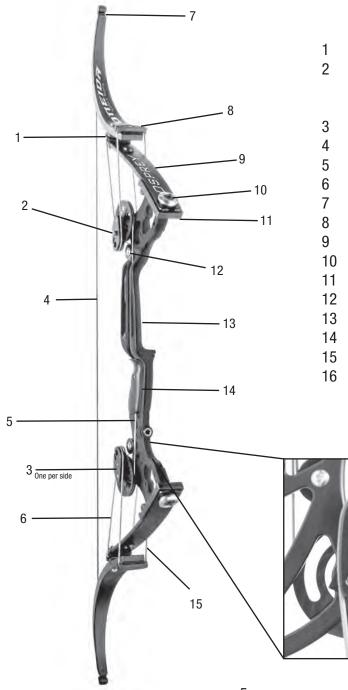
#### **PHOENIX BOW**

This list of individually numbered parts will help you with the set-up and care instructions found later in this manual. You may find it helpful to refer back to this graphic as a reference.

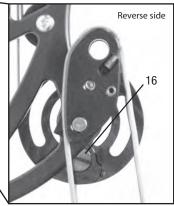


#### **OSPREY BOW**

This list of individually numbered parts will help you with the set-up and care instructions found later in this manual. You may find it helpful to refer back to this graphic as a reference.



- 1 Hinge
- 2 Orange Timing Screw and Timing Assembly Tensioning Hub
- 3 Cam
- 4 Bowstring
- 5 Timing Cable
- 6 Power Cable
- 7 Outboard Limbs
- 8 Saddle
- 9 Power Limb
- 10 Weight Bolt
- 11 End Cap
- 12 Idler Wheel
  - 13 Riser
  - 14 Grip
  - 15 Yoke Cable
- 16 Timing Take Up



#### **SETTING UP YOUR BOW**

#### WARNING! DO NOT PUT YOUR ONEIDA BOW IN A TRADITIONAL COMPOUND BOW PRESS. DOING SO WILL DAMAGE YOUR BOW.

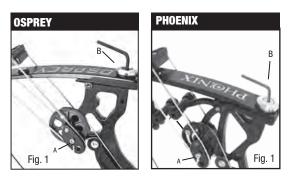
#### **Measure Your Draw Length**

The associate at your local Oneida Dealer can help you with this. Or you can do it yourself, while pointing your bow in a safe direction (downrange) with a secure backstop. Place a full length arrow on your bow, drawing with fingers or the release you'll be using, according to your shooting style. Draw to your anchor point. Mark the arrow shaft even with the front of the riser. Slowly let down your draw, and remove the arrow. Measure the length from the arrow nock, to the mark on your arrow shaft. This is your draw length, and will help you select your bow set-up from the chart.

**Note:** If you decide to use a shorter arrow because your arrow rest is mounted behind the riser, use that shorter length when consulting an arrow selection chart.

#### **Draw Weight Adjustment**

The draw weight range on your Oneida bow is 30-50lbs or 50-70 lbs. Oneida bows ship with the draw weight set in the middle of the draw weight range. Before changing the draw weight, draw the bow. It may be set just right for you. If not, adjust as follows.



WARNING! DO NOT ADJUST THE WEIGHT BOLTS UNTIL YOU LOOSEN THE ORANGE TIMING SCREW. DOING SO CAN CAUSE DAMAGE, AND OTHERWISE PUT STRESS ON VARIOUS POINTS OF THE TIMING AND POWER TRANSFER SYSTEMS.

FOR PHOENIX BOWS: WARNING! ANY ADJUSTMENT OF DRAW WEIGHT WILL REQUIRE YOU TO ADJUST THE SUPPRESSION SYSTEM. PRIOR TO ADJUSTING DRAW WEIGHT, LOOSEN CABLE STOPS AND STRING STOP OF SUPPRESSION SYSTEM (SEE PAGE 9). RETIGHTEN THESE AT THEIR NEW POSITIONS ONCE DRAW WEIGHT HAS BEEN ADJUSTED.

- 1. Loosen the orange timing screw (Fig. 1A).
- 2. If your bow is a Phoenix, loosen the suppression system stops at this time (see page 9).
- 3. The draw weight can be adjusted using the 2 Weight (adjustment) Bolts. Use a 3/16" Allen wrench for this procedure. Each bolt has to be adjusted exactly the same amount as the other. It is important to alternate between each bolt, adjusting only 1 turn in the same direction each time (Fig. 1B).
  - Turning the bolts clockwise  $\frown$  increases the draw weight.
  - Turning the bolts counter-clockwise <u>counter-clockwise</u> decreases the draw weight. After adjusting the draw weight, you should check your tiller before tightening the Orange Timing Screw (see page 7).

#### **Measuring and Adjusting Tiller**

Correct tiller is achieved when the distance between the string and the nose of the cam is equal on both top and bottom cams of the bow. Measure the tiller from center of hole at the nose of the cam (Fig. 2). If the measurements differ from one end versus the other, you have two options for matching them:

#### Loosen orange timing screw

- A. You can move the cam nose closer to the string on the longer measuring side (increasing draw weight slightly). To move the cam nose closer to the string, carefully turn the (draw) weight bolt clockwise while watching the cam nose movement (Fig.1B)
- B. You can move the cam nose further from the string on the shorter side (slightly reducing the draw weight). To move the cam nose away from the string, turn the (draw) weight bolt count er-clockwise.

#### Once your adjustment is made, re-tighten the Orange Timing Screw.

**Tension check:** To check if your bow has been properly adjusted, hold the bow upright. Use the thumb of your other hand to press on the cable directly below the base of the grip. The cable should only shift 3/16".

#### If your bow is a Phoenix, tighten suppression system (see page 9)

#### **Brace Height**

Brace height is measured from the deepest part of the grip to the string (Fig. 3). Consult the chart for the brace height on your set-up.

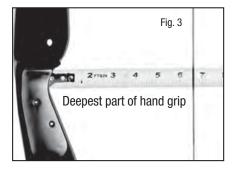
#### **Module System**

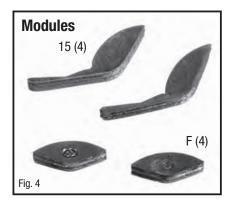
Your Oneida bow comes with F modules factory installed along with additional modules included in the box (Fig. 4), to help you utilize draw weight range and let-off settings. Your bow allows 2"–3" of draw length adjustment, and falls into one of the 3 set-up configurations listed on page 8.

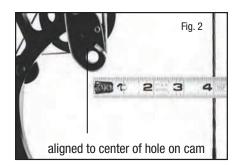
#### **Changing Modules**

To change Modules, follow these steps:

- A. Verify that you have all 4 Modules (one for each cam), and that they are the same shape.
- B. Due to molding flash, sometimes the flat side of the modules may need to be touched up with fine sandpa-per to achieve a smooth fit into the cam. This is best done by laying a sheet of very fine sandpaper, or a single cut flat file flat on a







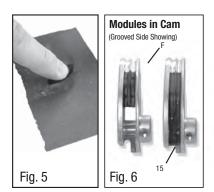
bench, and moving the flat surface of the module around to remove burrs. Only a brief touch up will do the trick (Fig. 5).

- C. Loosen the Cam Set Screw (Fig. 7), and remove the Module by pulling the rear cable back slightly, dislodging the Module gently with an allen wrench, and sliding it out.
- D. Install the new Module with the grooved side facing toward the cable (Fig. 6). Push it in gently but firmly until it matches up to the cable grooves on the cam. Tighten the set screw snugly, but DO NOT OVER-TIGHTEN.

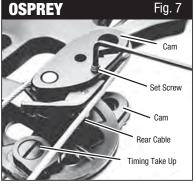
| Module Chart |         |        |
|--------------|---------|--------|
| Draw Length  | Let Off | Module |
| SHORTEST     | Low     | 11     |
|              | Medium  | 12     |
| RANGE        | High    | E      |
|              | Low     | 14     |
| MID RANGE    | Medium  | 15     |
|              | High    | F      |
| LONGEST      | Low     | 17     |
|              | Medium  | 18     |
| RANGE        | High    | G      |

#### Timing Cable Tension (Take Up)

To set the timing tension, locate the timing takeup (Fig. 7). Insert flat head screw driver and loosen the set screw on the side of the hub. Turn flat head clockwise to tighten timing cable. Timing cable tension is measured underneath the grip.





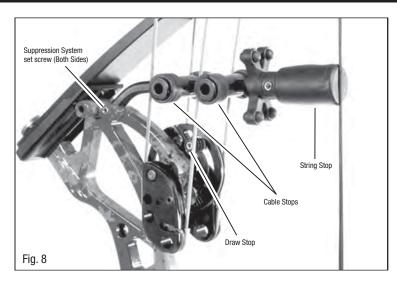


#### Suppression System (on the Phoenix bow only)

The Phoenix comes equipped with a suppression system that stops the bow string's oscillations after release.

# IMPORTANT: WHENEVER YOU ADJUST DRAW WEIGHT (SEE PAGE 6) YOU WILL NEED TO ADJUST THE SUPPRESSION SYSTEM AT THE SAME TIME.

#### ADJUST TENSION SO THAT CABLE STOPS TOUCH CABLES AND STRING STOP TOUCHES BOW STRING BUT DO NOT APPLY PRESSURE TO CABLES AND STRING



#### Adjusting your Suppression System (Prior to adjusting draw weight)

- 1. With allen wrench, loosen set screws inside cable stops. (Fig 8A)
- 2. Loosen set screw on string stop (Fig 8B).
- 3. Adjust draw weight (see procedure on page 6)
- 4. Position cable stops so that they touch cables but do not apply pressure.
- 5. Position string stop so it touches bow string but does not apply pressure.
- 6. Tighten set screws in cable stops and string stop.

#### **Cable Maintenance**

There are three types of cable on your Oneida bow:

- 2- Power Cables
- 2- Yoke Cables
- 1- Timing Cable

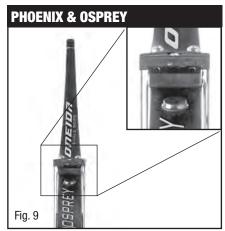
The Power and Yoke cables on your high-performance bow should be inspected annually for wear and replaced by the Dealer as needed. Lighter arrows and a higher draw weight may require more frequent replacement. Replacement is required if any fraying is evident. Failure to replace these cables before they break could result in damage to your bow, and void the warranty coverage.

#### **Limb Alignment**

The limb configuration of an Oneida bow is unique. A power limb extends from the riser, and connects to the outboard recurve limb with a hinge. The butt end of the outboard limb overlaps the power limb for a few inches past the hinge. The butt end of the outboard limb must always be aligned parallel to the power limb (Fig. 9).

Under normal conditions, outboard limbs will remain properly aligned indefinitely. Occasionally these limbs lose alignment through a rough bump from a minor mishap.

An outboard recurve limb that appears warped, rarely has any permanent damage. Usually issues with limb alignment are a result of either of the following situations:



- A. The outboard recurve limb butt section is not sitting parallel with the power limb.
- B. A yoke cable has shifted laterally in the saddle to create an imbalance in the yoke cable tension, pulling the limb out of alignment.

Contact your dealer or Oneida Eagle tech support. (info@oneidaeaglebows.com)

#### **Simple Maintenance Indicators**

#### **BOW NOISE CAN RESULT FROM:**

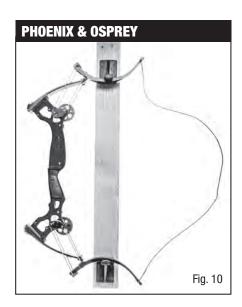
- A. Brace height out of recommended range
- B. Hinge needs oiling
- C. Saddle screw not tight (clicking noise)
- D. Loose timing system

#### ERRATIC ARROW FLIGHT CAN RESULT FROM:

- A. Improper arrow size
- B. Loose timing system
- C. Tiller out of adjustment
- D. Improper tuning of bow and arrow combination

#### **Bow String Replacement**

Before each shooting session, the bow's string should be visually checked for frayed or broken strands, or worn serving.



#### To change a string:

- A. Draw the bow and place it between the two limb compression blocks on an Oneida Compression Jig. (Fig. 10) Item # 20017
- B. Remove the old string and replace it with a new one of the same size.
- C. Draw the bow and remove it from the jig.
- D. Install a new nocking point.

This page intentionally left blank.

This page intentionally left blank.

### **ONEIDA EAGLE BOWS CHART**

| DESCRIPTION                | MODEL | DRAW<br>LENGTH<br>(IN) | DRAW<br>Weight<br>(LBS) | STRING<br>LENGTH<br>(IN) | YOKE<br>CABLE | POWER<br>CABLE | BRACE<br>Height<br>(IN) |
|----------------------------|-------|------------------------|-------------------------|--------------------------|---------------|----------------|-------------------------|
| OSPREY, SHORT, 30-50, RH   | OSR-S | 25.5-27.5              | 30–50                   | 41.75                    | Red/White     | Black/Pink     | 6"-6 <sup>3/8</sup> "   |
| OSPREY, MEDIUM, 30-50, RH  | OSR-M | 27.5–29                | 30–50                   | 42.25                    | Red/Blue      | Black/Black    | 6"–6 <sup>3/8</sup> "   |
| OSPREY, LONG, 30-50, RH    | 0SR-L | 28–31.5                | 30–50                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |
| OSPREY, SHORT, 30-50, LH   | OSR-S | 25.5-27.5              | 30–50                   | 41.75                    | Red/White     | Black/Pink     | 6"–6 <sup>3/8</sup> "   |
| OSPREY, MEDIUM, 30-50, LH  | OSR-M | 27.5–29                | 30–50                   | 42.25                    | Red/Blue      | Black/Black    | 6"–6 <sup>3/8</sup> "   |
| OSPREY, LONG, 30-50, LH    | 0SR-L | 28–31.5                | 30–50                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |
| PHOENIX, SHORT, 30-50, RH  | PHX-S | 24.5-27.5              | 30–50                   | 41.75                    | Red/White     | Black/Pink     | 6"–6 <sup>3/8</sup> "   |
| PHOENIX, MEDIUM, 30-50, RH | PHX-M | 26.5–29                | 30–50                   | 42.25                    | Red/Blue      | Black/Black    | 6"–6 <sup>3/8</sup> "   |
| PHOENIX, LONG, 30-50, RH   | PHX-L | 28–31.5                | 30–50                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |
| PHOENIX, SHORT, 30-50, LH  | PHX-S | 24.5-27.5              | 30–50                   | 41.75                    | Red/White     | Black/Pink     | 6"–6 <sup>3/8</sup> "   |
| PHOENIX, MEDIUM, 30-50, LH | PHX-M | 26.5–29                | 30–50                   | 42.25                    | Red/Blue      | Black/Black    | 6"-6 <sup>3/8</sup> "   |
| PHOENIX, LONG, 30-50, LH   | PHX-L | 28-31.5                | 30–50                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |
| PHOENIX, SHORT, 50-70, RH  | PHX-S | 24.5-27.5              | 50–70                   | 41.75                    | Red/White     | Black/Pink     | 6"–6 <sup>3/8</sup> "   |
| PHOENIX, MEDIUM, 50-70, RH | PHX-M | 26.5–29                | 50–70                   | 42.25                    | Red/Blue      | Black/Black    | 6"-6 3/8"               |
| PHOENIX, LONG, 50-70, RH   | PHX-L | 28-31.5                | 50–70                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |
| PHOENIX, SHORT, 50-70, LH  | PHX-S | 24.5-27.5              | 50–70                   | 41.75                    | Red/White     | Black/Pink     | 6"–6 <sup>3/8</sup> "   |
| PHOENIX, MEDIUM, 50-70, LH | PHX-M | 26.5–29                | 50-70                   | 42.25                    | Red/Blue      | Black/Black    | 6"-6 <sup>3/8</sup> "   |
| PHOENIX, LONG, 50-70, LH   | PHX-L | 28-31.5                | 50-70                   | 43.75                    | Red/Yellow    | Blue/White     | 6 <sup>3/4"</sup> -7"   |

### **ONEIDA EAGLE BOWS GEAR**

Standout among your bow fishing buddies by wearing Oneida Eagle Bows Shirts, Hats, and Hoodies. www.ONEIDAEAGLEBOWS.COM is source for Apparel, Parts, Videos, etc.



Check us out on our website, www.oneidaeglebows.com, Facebook, and You Tube for additional information, and a link to share your bowfishing wins with an Oneida Eagle Bow.





2726 East Jean Street Springfield, M0 65803 (417)-873-4596 info@oneidaeaglebows.com www.OneidaEagleBows.com