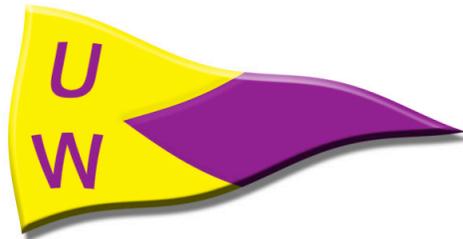


INSTRUCTOR HANDBOOK



WASHINGTON YACHT CLUB

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INTRODUCTION

The purpose of this handbook is to provide an instructor the knowledge and materials necessary to successfully teach classes at the Washington Yacht Club. Within the pages of this manual you'll find ratings standards, helpful hints, and useful diagrams and spreadsheets. This material should supply you with an excellent starting point to work and expand from as you progress from class to class. Good Luck!

Vice Commodore, WYC

STANDARDS

REQUIREMENTS FOR A BRAVO RATING

1. Pass the Bravo Written Test or Centerboard Novice Written Test.
2. Successfully complete proper boat check-out:
 - a. Yellow form is filled in completely and accurately.
 - b. Membership card is current with name printed on front.
 - c. Both check-out form and membership card are posted together on the proper clip.
3. Properly rig the boat.
4. Demonstrate proficient sailing skill in at least 3 knots of wind:
 - a. Show an understanding of different points of sail.
 - b. Complete three consecutive tacks.
 - c. Complete three consecutive controlled jibes.
 - d. Complete prompt and successful MOB recovery.
 - e. Successfully complete a wet capsize recovery.
5. Properly derig the boat.
6. Complete proper boat check-in:
 - a. Remove yellow form and fill in return time.
 - b. Complete any necessary damage reports.
7. Display consideration for the safety of lives and for the protection of club equipment.

REQUIREMENTS FOR A DINGHY NOVICE RATING

1. Pass the Centerboard Novice Written Test.
2. Successfully complete proper boat check-out:
 - a. Yellow form is filled in completely and accurately.
 - b. Membership card is current with name printed on front.
 - c. Both check-out form and membership card are posted together on the proper clip.
3. Properly rig the boat:
 - a. Demonstrate correct tying of a figure 8, square, bowline, and cleating knot.
 - b. **Important:** For lasers, make sure the cunningham is tied around the gooseneck before boat is capsized on the dock. For FJ's, ensure mainsail is not raised passed the first batten while on the dock or pavement.
4. Demonstrate proficient sailing skill in at least 3 knots of wind:
 - a. Show an understanding of different points of sail.
 - b. Complete three consecutive tacks.
 - c. Complete three consecutive controlled jibes.
 - d. Complete prompt and successful MOB recovery.
 - e. Successfully complete a wet capsize recovery.
5. Properly derig the boat:
 - a. **Important:** For lasers, make sure the cunningham is tied around the gooseneck before boat is capsized on the dock. For FJ's, ensure mainsail is lowered and centerboard is raised before taking the boat out of the water.
 - b. Fold sails correctly on the dock.
6. Complete proper boat check-in:
 - a. Remove yellow form and fill in return time.
 - b. Complete any necessary damage reports.
7. Display consideration for the safety of lives and for the protection of club equipment.

REQUIREMENTS FOR A DINGHY INTERMEDIATE RATING

1. Pass the Centerboard Novice Written Test.
2. Successfully complete proper boat check-out:
 - a. Yellow form is filled in completely and accurately.
 - b. Membership card is current with name printed on front.
 - c. Both check-out form and membership card are posted together on the proper clip.
3. Properly rig the boat:
 - a. Demonstrate correct tying of a figure 8, square, bowline, rolling hitch and cleating knot.
 - b. Cunningham, boom vang, and outhaul should be set appropriately for wind conditions.
4. Demonstrate good sailing skill in at least 10 knots of wind:
 - a. **Important:** Student needs to be hiking out.
 - b. Complete three consecutive tacks.
 - c. Complete three consecutive controlled jibes.
 - d. Complete prompt and successful MOB recovery.
 - e. Successfully complete a wet capsized recovery away from the dock.
5. Properly derig the boat.
6. Complete proper boat check-in:
 - a. Remove yellow form and fill in return time.
 - b. Complete any necessary damage reports.
7. Display consideration for the safety of lives and for the protection of club equipment.

CLASS PREPARATION

To Do List

- 3-4 days before class: Email your students.
 - Good info to include: some info about yourself, class dates, times, appropriate attire for different class sessions, what you expect your students to have read/completed before the first session etc. Also important is to remind your students that you will not allow them to participate in the class without a current membership, and that they should bring their member card to class.
- 1-2 days before class: Check on boat status. This includes the whalers.
 - How many Lasers are available? FJ's?
 - Do the whalers have enough gas for your class? If you use the emergency gas, please refill the containers.
- Night before class: Check class list for updates.
 - You can access the WYC database via our homepage. If you need a password, please contact the Vice Commodore.
 - On the database mainpage there should be a link to classes you teach.
- Day of class: Teach!
 - Make sure you double check and sign all student checkout forms before you go on the water.
- 1-2 days after class: Send follow up emails.
 - Good info to include: where to go next, how to advance ratings, ways to get more involved with the club.
 - Email the Vice Commodore with the names of potential AI's from your class.

WHALER CHECKLIST

SAIL AND FUEL LOCKER

- Always post WYC membership card
- Post yellow checkout sheet if taking a whaler out of sight of the WAC
- Wear a life jacket (it sets a good example)
- Check status of “emergency gas” and extra oil

ON THE DOCK

Safety Checks

- Fire extinguisher
- Flares
- PFDs
- Extra Line
- Swim ladder
- Running lights
- Bilge pump
- Radio

Engine Checks

- Check fuel level** and fuel line priming bulb
- Check oil** (Engine must be in the down position.)
- Check position of “dead-man” switch

Starting

- Take the engine out of gear and place it in fast idle.
- Start engine
- Use choke if necessary (**Note:** Engine may flood if too much choke/throttle is used.)
- Check cooling water
- Warm up the engine for a few minutes at fast idle.

ON THE WATER

Safety

- Always be aware of the propeller!**
- Keep people in front of the boat.
- Kill the engine IMMEDIATELY**, if a swimmer goes behind the bench seat
- Restart the engine only when the swimmer is back in a boat

Whaler Operation

- Shift gears quickly and smoothly. Grinding is bad!
- Accelerate/decelerate slowly
- Observe speed limit restrictions
- Be aware of your wake
- Keep one hand on the wheel and one on the throttle

Mast in Mud

- ❑ Pick up capsized sailor
- ❑ Nose the bow of the whaler up to the capsized boat with the daggerboard/centerboard at the whaler's bow.
- ❑ Instruct sailor to hold the daggerboard/centerboard
- ❑ Slowly back down the whaler pulling the mast out the way it went in.

Shallow Water (i.e. lily pads, dirtbergs)

- ❑ Throw a line **OR** paddle to stranded sailor.
- ❑ Keep the whaler clear or you might get stuck.

Towing

- ❑ Pass the sailor a line. The stern towline works best.
- ❑ Instruct him/her to take several wraps around the mast and hold onto the end. Do not let them tie a knot.
- ❑ Tow slowly and look behind often.

Docking

- ❑ Come in slowly
- ❑ Remember you need power to steer
- ❑ Tie the whaler securely
- ❑ Lock the boat
- ❑ Turn radio OFF
- ❑ Return keys to sail locker

TEMPLATES

EXAMPLE INTRODUCTION EMAIL

Courtesy of Claudette Meyer

Subject: Novice Dinghy Class

Welcome to the Washington Yacht Club!! You are receiving this email because you are either enrolled in or waitlisted for the Wednesday evening Novice dinghy class. If you are receiving this in error, or would like to drop the class, please reply to this email ASAP. At the moment, there are 20 students signed up for this class. As such, the other instructors and I have decided to allow everyone to attend the first class session. Students who do not show for the first session will be dropped from the class list. Depending on the turnout, availability of boats, and student motivations, we will decide how many students to take for duration of the class.

So a bit about the class...it starts this Wednesday (tomorrow) and lasts for 6 sessions. You will need to come prepared to class, having read and re-read the daysailer handbook that you should have received when you signed up for the club. You can also access it online:

<http://students.washington.edu/sailing/daysail/index.html> . For the class, pay special attention to Chapters 4 & 5 (Basic sailing and Safety). BUT, you will also need to be very familiar with the other chapters to pass the written test!! For the class, attempt to memorize the steps required to rig a boat. We will practice these steps the first session and throughout the class. Should time allow, you should practice a few basic knots. Grab a shoelace and start practicing:

The square knot: http://www.sailingusa.info/images/reef_knot.jpg

The bowline: http://www.sailingusa.info/video_1_bowline.htm

The figure eight: http://www.sailingusa.info/video_figure_8.htm

Almost done. What should you wear?? NO COTTON!! Cotton absorbs water and holds it close to your skin. Fleece, polypro, or wool are all good options if you do not own or cannot borrow a wetsuit. Of course, if it's sunny, shorts and a t-shirt are fine, but bring a change of clothing. With some luck, you won't get wet the first day...but it's always a good idea to be prepared.

We look forward to meeting you tomorrow. If you have any questions, don't hesitate to contact any one of us.

Your instructors,
Claudette Meyer
Cedric Chenal
Eric Bahor
Peter Colleran

EXAMPLE FOLLOW UP EMAIL

Courtesy of Abi Plawman

Sailors,

You were a fantastic class! I had a great time being your instructor and I hope to sail with you soon!

Now that you have taken a class and gotten some basic skills, you may be wondering where to go next to improve further or to earn ratings. Here are several options:

First, above all, practice! Every time you go out on the water, regardless of wind conditions, you will gain familiarity with the boat and the weather.

Second, you can come down to the WAC when the Ratings Examiner is holding hours, and you will be signed out to practice and get sailing pointers, or even take a ratings test. Third, you can come down and look for a Chief to sign you out -- many of their pictures are posted in the sail locker, and it is part of their job to sign you out if they feel comfortable doing so.

Often, if you contact a chief by e-mail ahead of time, they will be willing to go out on the water and give you some tips.

Finally, occasionally instructors teach intermediate classes -- they are a wonderful way to learn high-wind techniques as well as to polish your skills in lower wind conditions.

A few reminders:

Always check out the conditions before you sail -- often a sign is posted on the sail locker, but you are responsible for sailing only in your allowed conditions.

If you don't remember something, ASK!! Anyone will be glad to help you out with everything from rigging to filling out a check-out form. Your novice rating expires six months from the day you received it, so go out and practice for an intermediate rating!

Go sailing!

Feel free to contact me by e-mail if you have any other questions, and I look forward to seeing you out on the water!

Dinghy Novice Class - Sample Skill List

| Skills | Dates covered | | | |
|---|---------------|--|--|--|
| Know the boats | | | | |
| Hull, Bow, Stern, Transom | | | | |
| Center/Dagger board, Rudder, Tiller, Hicking stick | | | | |
| Mast, Boom, Gooseneck, Stays, Shrouds | | | | |
| Halyard, Sheet, Outhaul, Downhaul, Vang | | | | |
| Sail: head, tack, clew, luff, foot, leach, battens, tell tales | | | | |
| Sailing Terms | | | | |
| Port, Starboard | | | | |
| Windward, Leeward | | | | |
| Tacking, Jibing | | | | |
| Port tack, Starboard tack | | | | |
| Closed hauled, Close reach, Beam reach, Broad reach, Run | | | | |
| Luffing, In irons | | | | |
| Sailing by the lee | | | | |
| Club Rules and Safety Equipment | | | | |
| How and when to wear a lifejacket | | | | |
| Checkout procedures | | | | |
| Damage report procedure | | | | |
| Work parties | | | | |
| Laser rigging | | | | |
| Inspect the boat | | | | |
| Slide the stern off the docks and drain the boat | | | | |
| Replace the plugs, put the boat in the water | | | | |
| Tie the boat to the dock and swing it upwind | | | | |
| Grab a mast and put it all the way in the mast step | | | | |
| Attach the cunningham to the gooseneck and tighten | | | | |
| Capsize the boat on the dock | | | | |
| Slide the sail onto the mast | | | | |
| Attach the rudder and insert the daggerboard | | | | |
| Tie the clew to the boom (square knot with the tie downs) | | | | |
| Outhaul: boom-cleat, eye, clew, and bowline - explain purchase | | | | |
| Slip the boom onto the gooseneck | | | | |
| Pull in the mainsheet all the way, attach and tighten the vang | | | | |
| Right the boat | | | | |
| Untie the cunningham from the gooseneck | | | | |
| Lead the cunningham through the hole in the sail and tie it to the mast below the gooseneck | | | | |
| Laser unrigging | | | | |
| Ensure the mast is tied before capsizing | | | | |
| Ensure the boat is drained | | | | |
| Ensure the cockpit plug is removed | | | | |
| Ensure the sail is properly folded | | | | |
| Ensure the checkout sheet is properly returned | | | | |
| FJ rigging | | | | |
| Inspect the boat | | | | |
| Pull the boat off its slot and drain it | | | | |
| Replace all the plugs (up to 4, be sure to not forget any) | | | | |
| Unroll the sails and take out the jib, attach its head to its halyard and the tack to the bow. | | | | |
| Pull the jib up really tight using the purchase mechanism. There should be no tension left in the forestay | | | | |
| Run the jib sheets and tie figure eights at their end | | | | |
| Fully loosen the boom vang | | | | |
| Slide the main foot in its track | | | | |
| Outhaul: boom-cleat, eye, clew, eye, and figure eight | | | | |
| Attach the main head to the main halyard and hoist the main 1 to 3 feet, no more | | | | |
| Put the boat in the water, tie it bow into the wind | | | | |
| Raise the main the rest of the way and tie the main halyard to its cleat | | | | |
| Lead the cunningham through the topmost hole at the tack of the main, then to the cleat below the gooseneck | | | | |
| Put the boom back on the gooseneck | | | | |
| Tension the vang, outhaul and cunningham | | | | |
| Attach the rudder and tiller, tie the tiller tie-down line to the cleat on the tiller | | | | |
| FJ unrigging | | | | |
| Ensure the daggerboard and centerboard are up before bringing the boat up the ramp | | | | |
| Ensure the boat is drained | | | | |
| Ensure the sails are properly rolled | | | | |
| Ensure the checkout sheet is properly returned | | | | |
| Right of Way | | | | |
| Overtaking | | | | |
| Starboard over Port | | | | |
| Leeward over Windward | | | | |
| Boats restricted in maneuverability in the channel | | | | |
| Sailing Skills | | | | |
| Proper trim for all points of sail | | | | |
| How to stop beside a floating object | | | | |
| How to tack and jibe | | | | |
| How to get out of irons | | | | |
| How to recover from a wet capsize | | | | |
| Sculling and rocking the boat | | | | |
| Weather | | | | |
| Identify where the wind is | | | | |
| Identify the strength of the wind | | | | |
| Identify puffs and lulls in wind | | | | |
| Knots | | | | |
| Bowline | | | | |
| Reefing knot / Square knot | | | | |
| Clove hitch | | | | |
| Double half hitch | | | | |
| Cleating | | | | |
| Sheet bend | | | | |
| Figure eight | | | | |

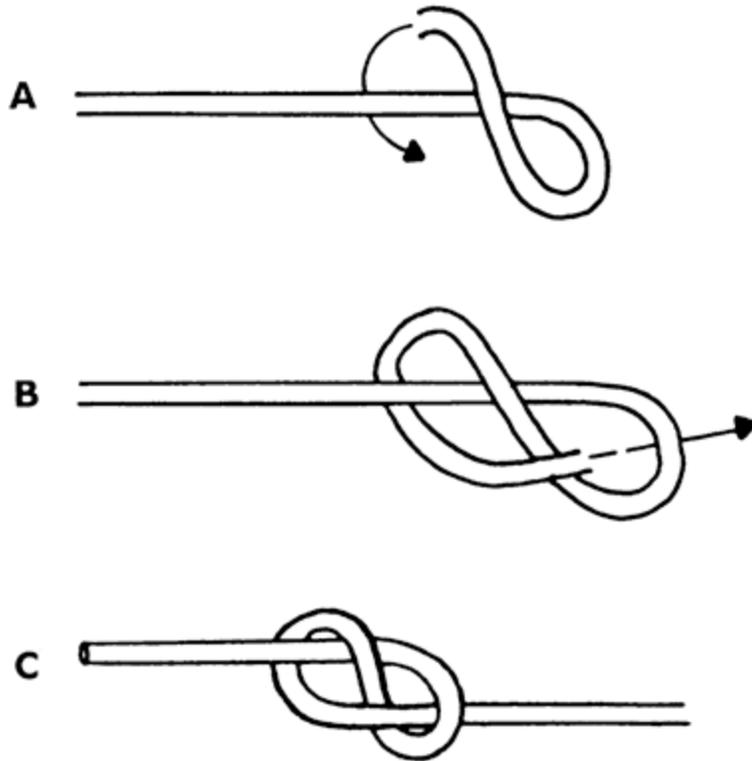
KB Novice Class - Sample Skill Sheet

| Skill | Not Done | Need Practice | Does OK | Does Well | Comments |
|--|----------|---------------|---------|-----------|----------|
| Sign out boat | | | | | |
| Check calendar | | | | | |
| Fill out checkout sheet | | | | | |
| Post sheet, member cards, and deposit card | | | | | |
| Rigging boat | | | | | |
| Check battery charge | | | | | |
| Check Navigation lights | | | | | |
| Install porta potty | | | | | |
| Clean porta potty | | | | | |
| Light stove | | | | | |
| Attaches fuel to motor | | | | | |
| Start motor | | | | | |
| Raising sails | | | | | |
| Raise main halyard | | | | | |
| Helm during raising of main | | | | | |
| Attach head sail | | | | | |
| Helm during raising of jib | | | | | |
| Basic Sailing | | | | | |
| Helm during tack | | | | | |
| Jib sheet control during tack | | | | | |
| Helm during jibe | | | | | |
| Jib sheet control during jibe | | | | | |
| Main sheet control during jibe | | | | | |
| Helm to alter course | | | | | |
| Trim jib to alter course | | | | | |
| Trim main to alter course | | | | | |
| Identifies other boat traffic | | | | | |
| Head sail change | | | | | |
| Hank on new Headsail | | | | | |
| Halyard control during headsail change | | | | | |
| Jib sheet control during headsail change | | | | | |
| Helm during headsail change | | | | | |
| Reefing the main sail | | | | | |
| Halyard control for reefing | | | | | |
| Helm for reefing | | | | | |
| Outhaul control for reefing | | | | | |
| Knots | | | | | |
| Bowline | | | | | |
| Reefing knot | | | | | |
| Clove hitch | | | | | |
| Half hitches | | | | | |
| Cleating | | | | | |
| Coiling | | | | | |
| Stopper knots | | | | | |
| Crew Overboard Recovery | | | | | |
| Helm for COB | | | | | |
| Keep watch for COB | | | | | |
| Docking | | | | | |
| Helm during docking with motor | | | | | |
| Helm during docking under sail | | | | | |
| Handling the bow line | | | | | |
| Handling the stern line | | | | | |
| Helm departing from dock | | | | | |
| Motor | | | | | |
| Start motor | | | | | |
| Operate motor under way | | | | | |
| Other troubleshooting | | | | | |
| Sail Trim | | | | | |
| Uses traveler | | | | | |
| Adjust jib car position | | | | | |
| Trim sails to tell tales | | | | | |
| Adjust helm to telltales/sail position | | | | | |
| Navigation | | | | | |
| Identify navigation aides on the water | | | | | |
| Take compass bearing | | | | | |
| Plot position on chart | | | | | |
| Calculate speed | | | | | |
| Communication | | | | | |
| Use marine radio | | | | | |
| Emergency call on radio | | | | | |
| Anchoring | | | | | |
| Participate in anchoring of boat | | | | | |
| Helm for anchoring | | | | | |
| Test anchor rode for placement of anchor | | | | | |
| Weather | | | | | |
| Identify where the wind is | | | | | |
| Identify the strength of the wind | | | | | |
| Identify puffs and lulls in wind | | | | | |
| Identify front moving in | | | | | |

HANDOUTS

KNOT DIAGRAMS

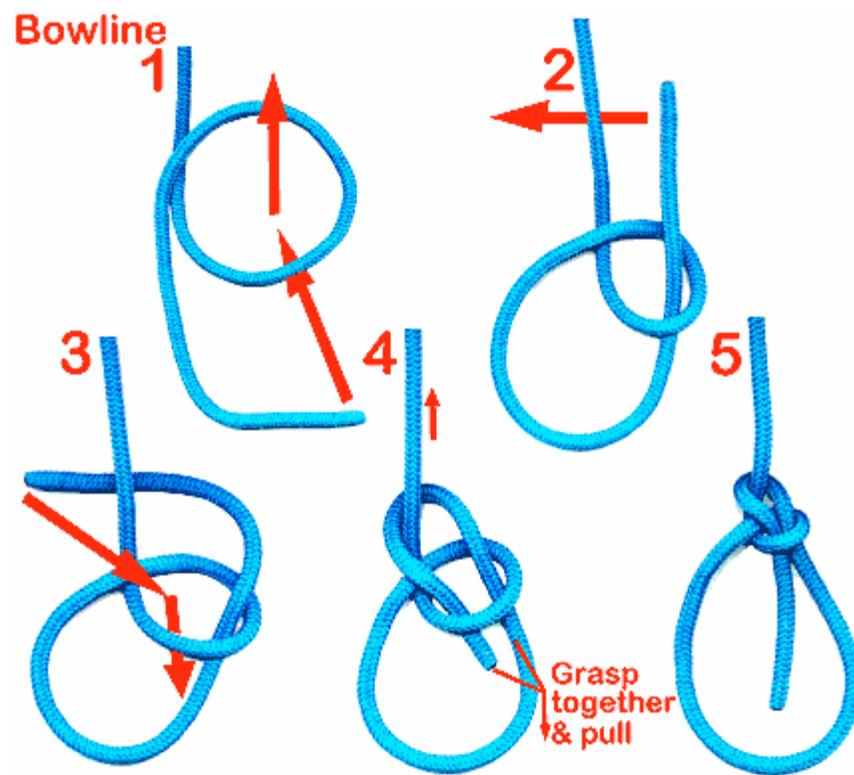
FIGURE 8



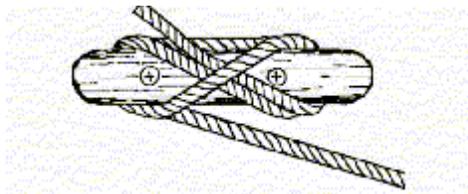
SQUARE



BOWLINE



CLEATING



TO GET A RATING:

- 1) Pass the Novice written test
- 2) Properly rig the boat
- 3) Tie the following knots: bowline, double half hitch, square knot, clove hitch, cleating hitch, and stopper knot
- 4) Perform 3 controlled tacks, close hauled to close hauled
- 5) Perform 3 controlled jibes on dead run, maintaining course
- 6) Perform a wet capsize recovery
- 7) Perform a crew overboard drill

Performing these skills in 1-7 knots will earn a Novice Single-handed rating, in winds above 7 knots you will earn an Intermediate rating.

For a double-handed rating, it's the same drill. During the COB, your crew will become inactive, sitting in the center of the boat with their back to the mast.

The Beaufort Scale of Wind Forces

The Beaufort Scale reflects both wind strength and sea conditions. Developed in 1805 by Admiral Sir Francis Beaufort of the British Navy. The scale divides wind and sea conditions into 12 "Forces" ranging from calm to hurricane. It describes typical conditions offshore in large bodies of water.

| Beaufort Number or Force | Wind Speed and Description | | | Effects Land/Sea | Probable Wave Height |
|--------------------------|----------------------------|-------|---------------------|---|----------------------|
| | MPH | Knots | Description | | |
| 0 | <1 | <1 | Calm | Still, calm air, smoke will rise vertically. Smooth like a mirror. | 0 |
| 1 | 1-3 | 1-3 | Light Air | Rising smoke drifts, wind vane is inactive. Small ripples like fish scales. | _ - _ foot |
| 2 | 4-7 | 4-6 | Light Breeze | Leaves rustle, can feel wind on your face, wind vanes begin to move. Short, small pronounced wavelets with no crests. | _ - _ foot |
| 3 | 8-12 | 7-10 | Gentle Breeze | Leaves and small twigs move, light weight flags extend. Large wavelets, crests start to break, some whitecaps. | 2 feet |
| 4 | 13-18 | 11-16 | Moderate Breeze | Small branches move, raises dust, leaves and paper. Small waves develop, becoming longer, whitecaps. | 4 feet |
| 5 | 19-24 | 17-21 | Fresh Breeze | Small trees sway. Moderate lengthening waves, with many white caps and some spray. | 6 feet |
| 6 | 25-31 | 22-27 | Strong Breeze | Large tree branches move, telephone wires begin to "whistle" Large waves, extensive white caps, some spray. | 10 feet |
| 7 | 32-38 | 28-33 | Near Gale | Large trees sway, becoming difficult to walk. Heaps of waves, with some breakers whose foam is blown downwind in streaks. | 14 feet |
| 8 | 39-46 | 34-40 | Gale | Twigs and small branches are broken from trees, walking is difficult. Moderately large waves with blown foam. | 18 feet |
| 9 | 47-54 | 41-47 | Strong Gale | Slight damage occurs to buildings, shingles are blown off of roofs. Rolling seas, dense foam, Blowing spray reduces visibility. | 23 feet |
| 10 | 55-63 | 48-55 | Whole Gale or Storm | Trees are broken or uprooted, building damage is considerable. Very high waves with long, overhanging crests. The sea looks white, visibility is greatly reduced. | 29 feet |
| 11 | 64-72 | 56-63 | Violent Storm | Extensive widespread damage. Wave edges are blown into froth, and the sea is covered with patches of foam. | 37 feet |
| 12 | 73+ | 64+ | Hurricane | Extreme destruction, devastation. The air is filled with foam and spray, and the sea is completely white, little visibility. | 45 feet |

USEFUL LINKS

WYC Lessons: <http://students.washington.edu/sailing/lessons/index.shtml>

WYC Database: <https://students.washington.edu/sailing/wycdb/>

WYC Daysailor Handbook: <http://students.washington.edu/sailing/daysail/index.html>

The square knot: http://www.sailingusa.info/images/reef_knot.jpg

The bowline: http://www.sailingusa.info/video_1_bowline.htm

The figure eight: http://www.sailingusa.info/video_figure_8.htm

NOTES