

# **Intro to Ultra Distance Paddle Racing**



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## The Ultra Race: Why in the World?

The “why” here is what makes this a compelling story, and one that never gets old as it directly feeds our deep rooted inspiration to thrive and survive. Ultra distance paddle sports are a great conduit to this classic story. Regardless of how difficult as these types of events may be, everybody I have ever spoken to agrees that the pain and discomfort leave you almost immediately but your personal realization of what you can accomplish or is obtainable will change your outlook on life forever.

Long distance paddling can be for anybody. In 2009, my sister just finished her PHD in Virology after 34 years of schooling and was passionately into her work. Yet something was missing to complete what she needed to fulfill her ambitions. That same year I asked her to run ground support for me in a 100 mile race in Texas. It was there she got a glimpse of what may be missing. It was the unmistakable glow of a person whose life was changed forever. The unmistakable spark and excitement of river stories told by **average men and women** that just finished the race. The knowledge of their new super-human ability to accomplish anything they set out to do that will remain in their minds forever.

That very same week she signed up for the Colorado 100 race in Texas and bought a beat up plastic sea kayak from a garage sale for less than a couple hundred bucks. Neither a kayaker nor an endurance athlete, she took to the water just a few times a week for an hour or two here and there having no idea of what to expect. Just three months later, she finished the race in the top 50%. But what makes her story so awesome is she found her super human ability 60 miles into the race and it was not at all in the form of a super athletic human, but an inspirational leader. At the 3<sup>rd</sup> and final checkpoint, ready to drop out herself, she saw the desperation in the faces of a crew of 6 that had already committed to quitting for a various number of reasons. Remembering why she was there and what she hoped to get from the event, she organized them as a team, utilizing each other’s resources, be they physical or mental, and got them all back in their boats. Members of this newly formed “flotilla” all finished the race paddling together for the next 40 miles. When they reached the finish line, they all put down their paddles and let her finish ahead of them. I was so inspired and eager to learn what she had to teach me, I signed up the next year to race with her in a double.

What makes the Kayaking Ultra race different than say Ultra Running or Adventure racing is that success is very attainable. This is not because it is easier per say, but because on the river, you keep moving even when you rest, thus allowing for continual forward progress. Also it is non-impact so there is no concept of knees simply buckling to the point you cannot finish. As long as you race smart, most anybody can do this. The first year my sister finished the Colorado 100, she would paddle hard for 30 minutes, float for 5 stretching out her fingers and wrist and eating, easy paddle for 25 or put in a solid additional push if there was a person to catch and took nearly 15 minutes at the 3 checkpoints eating proper meals and hydrating. Racing smart, she beat many kayakers who were WAY faster than she. To finish fast, you must finish.

## Training, Fundamental Principals

### Boat Resistance

*(Note, numbers below are examples only used to express principals, not scientific measurements)*

- The physics behind boat speeds is a funny thing. Getting faster is easy to a point, then all the sudden, you need to double, triple or even quadruple your workouts to get very small gains. It is close to an exponential curve. Here is a rough example: 5 “units of training” could get you all the way to ~80% max speed, (which we will call the sweet spot in this article). You may need 10 “units of training” to get you to ~ 90% max speed (you doubled your training for only 10% gains), and 20 “units of training” to get you to ~95% max speed (again double the training for only 5% additional gains). Keep in mind a “unit of training” may be stroke, speed, endurance, distance, or cross-training work, but it must be focused... More on this later.
- Good news here is if you cover your bases correctly and train smart, the 80 percent or the Sweet Spot is well within reach.
- In a long distance race, you will never be much over the “sweet spot” of your boat. To maintain faster speeds comes at a great cost and is not sustainable for a long race.
- The obvious goal here is to make sure you are fit, efficient and fast enough to keep your boat at its sweet spot for the full duration.

### Boats

- Choosing your boat for a long race is tricky business. “Faster” boats for many means a slower race. Simplified, the general idea is this. Per the example above, a faster boat will have a more expensive “Unit of Training”. IE:
  - o One “unit of training” in a sea kayak or canoe may be just 1 hour of work – thus taking 5 hours a week of training to hold the boat at its sweet spot of 5.0 mph for 100 miles.
  - o One “unit of training” in an Olympic Sprint K1 may be 3 hours of work – thus taking 15 hours a week of training to hold the boats at its sweet spot of 7.0 mph for 100 miles.
- So if you train for only 5 hours a week and still choose to race the Olympic sprint K1, odds are you will eventually slow down to well below the sea kayak 5mph, or have to take lots of stops and likely end up not even finishing. Thus making the “faster” boat way slower in reality.

- Much of boat choice will depend on your life time background in different boat types. If you have been in tippy boats all your life, then the extra expense will not be that much. If you are just starting out, it will be huge.
- Plastic sea kayaks, rec canoes, or other stable boats are the best choice for starters who want a solid finishing time.
- For many seasoned paddlers even a more stable 19inch wide race boats such as the Huki S1-R would be faster than the 17inch wide counterpart.

### Common Training Mistakes

- Many people sign up for a long distance race and then train for very long hours every weekend at speeds well below their boats sweet spot.
- Whereas this is likely to ensure you will finish the race, you are never working on actually getting faster
- Additionally, these continuous long sessions give your body a beating that you may not recover from, actually making you slower.

### Some Smart Training Guidelines

- The overall goal in training for long races is to be fit and efficient enough to keep your boat just at its sweet spot for the duration of the 100 miles.
- To do this, it is critical that one actually works on getting faster/stronger so you can reach the sweet spot, and hold it. Your speed is then supplemented by a few long paddles.
- There are 3 general types of workouts that help you get faster. These will be called your key workouts (We will go into examples later on)
  - Speed – Workouts where you do intervals of 10 seconds up to 1 minute
  - Endurance – Workouts where your intervals are greater than 1 minute.
  - Distance – Workouts where you go continuously with very little to no stops.
- The final workout is Long Distance training. I normally do only two of these before a long race (else I find I am always just recovering vs. getting faster). The distance can be done all in one sitting, or even over two days. I.E. one 5- to 8-hour paddle, or two 3-hour days back-to-back. One long-distance workout should be done about 6 weeks after you have started training, and one more 1 month before the event. It is good to always make these fun events. Good adventures in new locations with friends. Feel free to break them up. Eat lunch, whatever. What is critical here is you rig your boat as you would on race day and practice eating, drinking, stowing your gear within reach, and all that other stuff. Practice fast in and outs such as you would do at a checkpoint. Bathroom breaks.

- A great guideline for anybody, either Elite or just starting, is 3 key workouts per week, making sure there is a recovery day in-between. Two of the key workouts will be Speed/Endurance; and one of the key workouts will be Distance.
- Each week you will build up by adding in more intervals, or less rest in-between intervals, or longer distance. After 3 or 4 weeks of build, you have a rest/easy week. Then start again building more on your last set of intervals and distance. So each period between rest weeks is more intense than the last.
- I personally like the Tuesday, Thursday, then weekend schedule because regardless of what you do on your weekend, you have a day off before your Tuesday key workout.
- As you get more fit, have more time, you can add in “Filler” workouts in the off days to take you to the next level. These are designed to work on skills. i.e., stroke technique, focused sprints or time trials, ocean time, surfing... (more on this later also)
- You can also work in cross-training on the off days or after you completed your key workouts.

### Sustainable Forward Stroke

Since this clinic is targeted towards paddlers of all type, we will not go too much into the proper mechanics of any one stroke. I will strongly encourage everybody though to spend some time developing their forward stroke. Strength and training will only get you so far. Efficiency is king and is equally as important to getting faster as getting fitter and in shape is. For this reason, I encourage most to do all there filler workouts as stroke and form sessions as well as dedicate all off time in-between intervals with stroke work or drills. You do not want to develop bad muscle memory in this initial set learning.

The sustainable long distance forward stroke has been developed by distance kayakers to utilize only the most efficient parts of the forward stroke. Let's take a look at the traditional stroke mechanics.

- 1) **The catch** – the initial part of your stroke mechanically is both where your forward stroke is most efficient and also where you are able to generate the most power. This is a double win.
- 2) **Follow thru** – This part of the stroke utilizes smaller muscles but allows for maximum power output from your stroke, but at a big physical cost. This is key for conventional distances.
- 3) **Release** – The release is where you end your stroke and get ready for the next. Traditionally for kayaking, this has you bring your hands up to about your ear getting ready for maximum angle and output for your next catch.

Now let's take a look at the principles of the sustainable long-distance stroke. The principle here is to only utilize the most powerful and efficient parts of your stroke and avoid at all cost the parts that use small muscles or may cause fatigue.

- 1) **The catch** – Being the most efficient and powerful part of your stroke, this is going to be 90% of the sustainable forward stroke. Ultra paddlers may simply do a good catch, rotate, then release, eliminating most all of the follow thru. This puts the brunt of your force into your core and not on your arms.
- 2) **Follow thru** – Since the follow thru utilizes smaller muscles on the least efficient part of your stroke, distance paddlers may eliminate it almost all together. After the catch, many distance paddlers will go directly into the release.
- 3) **Release** – This is one of the most critical changes in the sustainable long distance stroke. What you want to focus on is never bringing your releasing hand above your upper chest (vs. your ears). This eliminates over-extension and use of your upper shoulder muscles and joints. It is absolutely paramount for surviving the distance.

The above changes will help both conserve energy and overuse injury to small muscle groups and joints.

### General Training Build up

- Start off with just getting time in your boat. Work on good stroke technique, possibly watch some of the stroke clinic videos.
- Next work in the Endurance Workouts with longer intervals and focused distance workouts
- Soon you will work in your first Long Paddle
- After this as you get more fit, and closer to your race, replace one of the endurance with a speed interval workout.
- Toss in your second and Last Long Paddle
- Finish off with reasonable distances, keeping focused on your 3 key workouts
- Easy the last few weeks.

**Attached is an example training schedule focusing on the three Key workouts plus build ups as discussed above. It also incorporates mini tapers for all the local races. This Example targets about only 4 to 6 hours a week.**

- You will need to play with this to adjust it as needed to fit your life.

- This example schedule is about 4 to 6 hours a week total. You can easily make it a lot more or less depending on your schedule or starting fitness level. See more below.

**Bumping It Up a Notch –More hours (Cross Training – “Filler” Paddles).**

In the off days, if you have the time and motivation.

- 1) Cross train as priority,
  - a. Light Gym / Elastics
  - b. Jogging
  - c. Swimming
  - d. Other
  
- 2) Filler Paddles / Skill training
  - a. Form Specific workouts. Slow paddles focusing on nothing but technique. Video yourself. Analyze. Make changes...
  - b. Do additional paddles that work on the skill you desire. I.E., if you want to be an ocean paddler, gradually work your way out in bigger water. If you want to go faster, do a few focused sprints and time trials and record your times.
  - c. As you get fit, you will find you can add more focused fillers in. Make sure though these do not leave you worn down for your 3 key workouts.
  - d. Here is an example of what a week may look like with some Filler Paddles and Cross training. This would be a very aggressive schedule.

Monday 2/18/2013	Tuesday 2/19/2013	Wednesday 2/20/2013	Thursday 2/21/2013	Friday 2/22/2013	Saturday 2/23/2013	Sunday 2/24/2013
	1 hour Speed	Easy stroke work	1 hour Endurance	Ocean paddle	1.5 hour Distance - Sturdy	REST
Jog	Weights / Bands	Jog	Weights / Bands			

**Bumping It Down: what if I cannot train in the boat during the week, or only 1 time per week?**

- 1) Try to cross-train as priority during week. This will still help you get fit and fast.
- 2) Keep to the weekend build-up schedule.

- a. If you have both days free. Do a speed/Endurance on Sat. hit it fresh and make it count, and the distance or long workouts in the boat on Sunday.
- b. If you only have one of the days. Split the distance paddle up into two sections, or even two separate workouts with a break in-between if you have the time. Do speed/endurance intervals in first hour or workout, then spend the rest of your time or your second workouts finishing the distance. If you are able to split up your workouts, possibly add 15 to 30 minutes to each of them when possible.

3) Examples

Monday 2/18/2013	Tuesday 2/19/2013	Wednesday 2/20/2013	Thursday 2/21/2013	Friday 2/22/2013	Saturday 2/23/2013	Sunday 2/24/2013
Jog	Light Weights / Bands	Jog	Light Weights / Bands		1 hour Speed or Endurance	1.5 hour Distance

Or

Monday 2/18/2013	Tuesday 2/19/2013	Wednesday 2/20/2013	Thursday 2/21/2013	Friday 2/22/2013	Saturday 2/23/2013	Sunday 2/24/2013
Jog	Light Weights / Bands	1 hour Endurance	Light Weights / Bands		1 hour Endurance 1.5 hour Distance	

**Example of Workout Types – get creative with these.**

**Endurance workouts** – You can start doing these right away, but keep in mind though that at first, you may not go that fast, but they are still focused efforts. The rest times will decrease and the “on” time will increase as you get more fit.

Example 1.

- 10 min warm up
- 4 x 1000 meters (or 4 x 6 minutes) 2 to 3 minutes off in-between, or until you feel rested. Each week, add an additional 1000, or remove 30 second of rest as you get more fit.
- 10 min warm down

Example 2.

- 10 min warm up
- Pick natural landmarks in your area or on your regular paddle. Race to the first one, then rest/cruise and form work till you feel rested, then race to the next

landmark. Each of the sections will be 2 to 15 minutes long. Do this for 40minutes. Focusing on maintaining a constant speed for the distance.

- 10 min warm down

Example 3.

- 10 min warm up
- 6minutes total x 5. Of each six minutes, first 2 minutes medium. Next 2 minutes faster, last two minutes fastest...
- 10 min warm down

**Speed workouts** – These start only after several solid months of training. They are intervals that are less than 1 min. The goal here is to make your endurance workouts faster.

Example 1.

- 10 min warm up
- 10 strokes on, 20 off x 10
- 5 min form work easy.
- 20 strokes on, 30 off x 10
- 5 min form work easy.
- 30 strokes on, 30 off x 10
- 10 min warm down

Example 2.

- 10 min warm up
- 1 minute on (or 60 strokes), 3 minutes off form workout (or until you feel rested) for 40 minutes
- 10 min warm down

**Distance workouts** – These are workouts where you simply go continuously with little to no stops. Very different than the Speed or Endurance where you go till you have to stop, then take a good break.

**Filler workouts** – These are workouts that you do on your off days or extra time when you feel ready. They are mostly Skill workouts. I.E., you may want to dedicate an easy session to just stroke work. Or if you are training for a river race or ocean race, cruise down a river or venture slowly into bigger water. As you get more fit, you may want to just do a single 1000 or 2000 meter time trial or a few 500 meter time trials. These should not subtract from your ability to be

at 100% for a key workout though. As you get more fit, you will be able to make the fillers more and more aggressive.

### Examples

- Venture down a river, work on lining up turns or reading water
- Gradually progress into bigger and bigger ocean water. Try some surf launches.
- Down winds
- Do a timed 1000 meter and log your results. Perhaps 2 500 meter at max pace and log those. As you get more fit, you may want to do even more of these.

**Cross training** – Idea here is aerobic cross training. Ones that people seem to love are the following. All good ideas at least 2x a week if you can swing it, more if you can only paddle on the weekends.

- Crossfit
- Gym circuit training
- Swimming
- Elastic bands – I strongly encourage this one to help with injury prevention and strength. The bands are about \$12.
- Yoga
- Jogging
- ....

## **Nutrition**

This is a difficult one as it varies greatly from one person to the next. Above all else, figuring out your nutrition is your takeaway from your long training paddle. You must figure this out for yourself though. There are a few key fundamentals that seem to always hold true.

- 1) Never let yourself get behind on eating or drinking. It takes a long time to recover from bonking and will cost you several hours or more if you are even able to finish
- 2) Typically your body wants food/water in a small but continuous amount. A mentor of mine called this the leaky raft principle. If you deflate, you are sunk. So never get that far. Simply continually put in small amounts often and stay inflated.
- 3) Unless you have this dialed in from multiple previous race experiences, I strongly recommend carrying an assortment of both food and drinks. Hot or cold weather, rested or exhausted, cruising or pushing it will all have huge impact on what you are able to digest.
- 4) Many expert racers will only take liquid food; many equally accomplished racers will only eat solid food. Both work. Note though liquid food diets more often than not tend

to cause stomach issues as you have tones of acids ready to digest the calories that are not needed by the liquids. I will go over ways to get around this in the Ultra Tips section.

**Here are several examples of my typical nutrition.** NOTE: I know many who cannot do this or prefer other methods. Again, this is just one example and you must figure this out thru trial and error on your long paddle.

- 1) I like to eat 150 calories every 30 minutes hungry or not. I have all these in individual packages either from the manufacturer or that I make with a vacuum sealer. All of these are foods that will not melt and will survive a few days if properly packaged.
  - a. A mini Clif bar
  - b. A Gu packet
  - c. A handful of cashews
  - d. A hung of summer sausage
  - e. Oatmeal cookies
  - f. Some sort of protein based energy bar
- 2) I also almost always carry at least one option for greater calories in case for what ever reason have to push it for longer periods of time.
  - a. Full sized energy bar
  - b. Ensure Plus (These are meal replacement drinks 350 calories)
- 3) At every checkpoint, I will do 450 calories of liquid food.
  - a. 6oz Ensure Plus is my favorite (ice cold if hot weather) and can be finished in <10 seconds.
  - b. A few gulps of flat Coke or Red Bull are my personal favorite.
- 4) Carrying two forms of liquid is a great idea. One is just water; the other is a drink mix, normally dilute.
  - a. More often than not, I only want water and go thru that first
  - b. Or if stomach feels good, I will enjoy the calories from the drink mix.

### **Race Strategies (Beginner, Intermediate and Advanced)**

There are many strategies to finish an ultra race. All of them depend on your goals, amount of training, and level of fitness. Consistently though, over this type of distance the people who race smart will have not only a better race time but an altogether better experience.

#### **Racing Smarter**

To me racing smarter is simple, it means avoid injury and make sure you are having fun. Here are some tips:

#### **Utilize the Checkpoints**

The checkpoints are a great opportunity to take care of yourself. Let's put it this way: the difference between 5.5mph and 6mph over 100 miles is over 1.5 hours. Let's assume only 50 minutes since first checkpoint is 25 miles into race.

Point is: if taking 5 to even 10 minutes at a checkpoint to fix your boat to make yourself more comfortable, simply just rest and stretch, or eat a good meal and hydrate, allows you to gain .5mph (which is very realistic), you are still 40 minutes faster than you would be if you just ran in and out neglecting yourself.

Even more importantly to the point above is this type of maintenance will allow you to have a more enjoyable race. It is no fun racing uncomfortable. So don't stress it. Take the time you need at the checkpoints.

Here are a few examples of how checkpoints may look for different level of racers. It is much faster in the long run to underestimate your skill level. You do not want to break down and have a miserable race.

Here are some examples.

- **Beginner** (10 to 15 minutes)
  - o Get out of boat and first go check in with officials
  - o Take care of bathroom and other personal needs
  - o Eat a larger meal and drink.
  - o Stretch out, apply sun lotion.
  - o If you have a race crew, let them pamper you.
  - o Re fill your water, Re stock your easy-access food supplies
  - o Fix anything with your boat that was bothering you, seat, placement of food and items you need
  
- **Intermediate** (5 minutes)
  - o Get out of boat and first go check in with officials
  - o Take care of bathroom and other personal needs
  - o Eat a larger meal and drink. Great time to catch up on this.
  - o Re fill your water, re stock your easy-access food supplies
  - o Stretch, stretch, stretch...
  - o Fix anything with your boat that was bothering you, seat, placement of food and items you need
  - o Get in boat and go.
  
- **Advanced** (<1 minute)
  - o Run out of boat and first go check in with officials
  - o Run back to boat and go
    - Only works if you have a crew with pre-made water containers who are skilled at re-stocking your craft
    - Only works if you can use the bathroom in the boat
    - Only works if you are flawless at eating and hydrating while you paddle.
    - ..... Else, it is a recipe for disaster.

### Pace

Remember the principal that you need to finish to finish fast. Losing a few minutes here or there is far better than slowly grinding to a halt. Here are some common suggestions:

- **Beginner** – !!!STRONGLY RECOMMEND THIS!!!!
  - o Organize your race by the hour
  - o Paddle sturdy for 40 minutes taking few breaks. Stay consistent
  - o Then take a full 5 minutes off while in the current
    - Eat
    - Drink
    - Stretch out wrists, legs and fingers during this time.
    - Bathroom if you need it.
  - o Then paddle easy for 15 minutes to round out your hour.
  - o You will have lost very little time and be rested and fueled for your next push.
  - o TEAM UP with people your same speed. This is the best way to have a fun race
  
- **Intermediate**
  - o Organize your race by the hour
  - o Paddle sturdy for 50 minutes taking few breaks. Stay consistent
  - o Then take a full 10 minutes with easy paddling with only off time to.
    - Eat
    - Drink
    - Stretch out wrists, legs and fingers during this time.
    - Bathroom if you need it
  - o TEAM UP with people your same speed and wash ride.
  
- **Advanced**
  - o Paddle at or just above your boats sweet spot continually
  - o Ride wake when possible to allow for some recovery
  - o Have your hydration set up for hands-free drinking
  - o Every 30 minutes, lose just a few strokes to eat food
    - Do a quick stretch of the wrists and shoulders only when you stop to eat.
  - o Pee in the boat

### Boat Rigging

Having what you need when you need it is paramount. Here are some suggestions for different skill levels:

**Food** – Make sure you have enough within reach to last in-between checkpoints

- For many fast race boats such as a SUP, surfski or OC, a minimal fanny pack is the best rigging you can get. I really like the one Wal-Mart sells. No extra frills and can carry more than enough food for 5 or 6 hours.

- Many sea kayaks have easy to reach compartments in them. Put your food here.
- Pockets in your spray skirt are a great place for quick access.
- Mesh bags inside your boat are also a great option.

**Drink** – There are many popular ways to carry your drink. Here are several ideas.

- Water bags that you can easily refill, or have pre-filled for you by your ground crew.  
NOTE: unless your boat is very stable, you will want these low in the boat. Not on the deck. You will also want to have it figured out how to replace or refill these fast.
- Carrying a water bag in the life vest is also very popular. With this method you can rig the tube to right at your mouth for fast drinking. Refilling this though is the issue and can take time.
- If you have an open decked boat, nothing will beat just a simple 2 liter bottle or red camping cooler with a small hole drilled in it and tube with Velcro that sticks to you.

**Medical** – Many will find there is an assortment of pills they want on the race. Additionally, having some sort of tape and quick access first aid can be paramount.

- What is important is you have any meds you choose to take in waterproof containers that can be opened and closed with one hand. After lots of experiments, what I like best is an empty Emergen-C or Nunns container with the top taped to flip. I will carry up to 6 of these in an easy access holder or simply Velcroed to my boat. All are clearly labeled with colors so I get what I want without having to think about it much.
- There are many other medical items that you may need during your race. In either the same container I carry my food, a different easy reach pouch, or even just Velcroed to my boat I always make sure I have in reach while paddling the following.
  - o Sunscreen
  - o Baby rash cream for chafing
  - o Chapstick with sunscreen
  - o Some sort of Band-Aid or medical tape



**Lights** – An entire book could be written about lights and one could make this as simple or complex as they wish. A lot depends on how long you will need them for, how fast you plan on going and how much you want to spend.

Lamps worn on the head tend to have several issues as a primary light source. First, every time your paddle crosses in front of you, the reflection from the lamp blinds you making it very difficult for you eyes to actually adjust to the light. The second is many times thru the night there can be lots of bugs. They will all swarm around your head. Regardless, head lamps are a great backup. I always carry a small one just in case and more than once had to use it.

For the reasons above. The best place by far to mount your light is the front of the boat. This keeps both the reflection and bugs away from you, but introduces the issue of how you turn the lights on, or readjust them if necessary.

I have yet to find a light for a reasonable price on the market that meets all my needs.

- Waterproof, robust
- 4 to 6 hours of light
- Very bright
- Remote control switch to turn on and off or long cord.

Here are several suggestions that have worked well for me in the past.

### ***Flashlight on Foam***

#### **Benefits**

- Cheap
- Easy setup

- Many waterproof designs available
- There are now some very good LED long lasting lights on the market.

#### Issues

- Cannot turn on and off without getting out of your boat
- Typically not that powerful

#### How to make it work / when to use

- This is a great simple method when you know you will only need a few hours of light.
- I will generally turn these on just before dark and hope they last till I finish
- I normally get long-lasting LED type lights made for diving.
- Energizer Blue label lithium batteries will double triple the life you get from regular batteries. But they do cost ~\$20 per 4.
- AGAIN – always carry a good long lasting LED headlamp for backup that you can access without getting out of boat.

#### Here are some photos of a simple flashlight system I often use.

**Note:** these are 10 year old cheap dim waterproof dive lights. There are much better products on the market now.

<http://www.rei.com/product/830453/princeton-tec-remix-headlamp> - seems pretty good as backup headlamp

<http://www.rei.com/product/808145/princeton-tec-amp-35-led-flashlight> - looks like much a brighter replacement LED version of the halogen ones below in the photos. Claims to burn all night on brightest setting.

There are many other brands and companies...





### *Make Your Own*

#### **Benefits**

- Very bright light as you can use HID's or fancy LED's
- You can have the switch in easy access.

### Issues

- Nowhere near as robust or dependable as a good old dive flashlight
- Can still be expensive
- You can spend days on these projects.
- Keeping the battery dry is paramount, and difficult

### How to Make It Work / When to Use

- I have a 13watt HID setup that I made in 2007. Lithium rechargeable Battery will power lamp for 12 hours and it is comparable to a car head light. It really lights up the river. See photo below
- I would probably only use this system if I was planning on racing thru the night in a small dark river with no moonlight. Else it is just not worth it.
- AGAIN – always carry a good long lasting LED headlamp for backup that you can access without getting out of boat.



Here are some examples of boat rigging setups

- **Beginner or No Ground Crew**
  - o **Food** – Have a good assortment in bags that you can easily get at. Keep the same bag thru the entire race if you like. Make sure you have enough for the entire race. Have lots of options of items to eat in there.
  - o **Drink** – Carry enough drink for each leg. Verify that there will be water at the checkpoints to refill if you need. Have your mix pre measured to put in your drink if you plan on using it.
  - o **Medical** – have a container in your dry bag with some basic pills and medical tape type items.

- **Lights** – If they are 100% water proof, you can put them on your boat from the start. But normally, I would suggest having them in a dry bag in your boat and not connected to the boat till just before dark.I.e.,at a checkpoint or an easy place to get off the river.
- **Advanced with Ground Crew**
  - **Food** - Have all your food prepackaged in 150-ish calories easy-peel packages. Have a location on your boat for just the food you need for each leg of the race. Have your ground crew simply take out and replace that entire container at the checkpoint. This can be done in seconds.
  - **Drink** - Have the drink for your entire race pre mixed and with your ground crew in amounts just enough for each leg. Have places on your boat where the drink can easily be replaced by your ground crew at each checkpoint.
  - **Medical** - Have any pills you want to take in water proof one hand containers that can be reached while paddling.
  - **Lights** - Have your lights with your ground crew to give you at the final checkpoint if you think you will need them. Must be able to be easily connected.

## Finally, Have a Race Plan

This is critical. Have a general idea of what you hope accomplish. Never be afraid to bump your plan down. You can pick and choose these from the above sections (Pace, Checkpoint, and Rigging) based on how you feel.

- **Full Beginner**
  - Beginner pace plan
  - Beginner checkpoint plan
  - Rigged for self support
- **Beginner with Lots of Time on the Water**
  - Intermediate pace plan
  - Beginner checkpoint plan
  - Rigged for ground crew
- **Sturdy Weekend Warrior**
  - Intermediate pace plan
  - Intermediate checkpoint plan
  - Rigged for self support
- **Fast Paddler with No Long-Distance Race Experience**
  - Advanced pace plan
  - Full beginner checkpoint plan.
  - Rigged for ground crew

You get the idea...

## Tips

### Repair Kit

This is a must have, I have yet to *not* use mine on long race.

- Pipe wrap tape / Duct tape
- Zip ties
- All parts that you may need to fix your rudder or other parts of your boat
- Small multi tool with pliers and knife
- A dry rag in multiple Ziploc bags – tape will not stick to a wet boat.



### Hands / Blisters

Your hands will probably not be happy about this event. Many get blisters under their fingernails that are exact same as runners get on their toes. This is very common. Most also will get standard blisters on their hands. Loose grip helps a lot. Also, best to not pop blisters till you finish.

Figuring out your hand system is your secondary goal on your Long paddle.

I have tried many methods and found for me, since my hands are almost always wet, gloves with water repel cream works best, the below has been flawless, not even one blister after 76 hours of kayaking.

Simple painting gloves with rubber-coated fingers are still my favorite (sold at most any hardware store) they are very light and dry fast. I first cover my hands with Aquaphor or white zinc-oxide baby rash cream (original white Desitin is the best, can be bought at any drugstore in easy carry tubes), then put them into the gloves. It is quite the goopy mess and don't expect to be able to a 1000 meter dash. This system also makes using your hands not the easiest.

Others who tend to keep their hands mostly dry will not like the above system.

### Body Chafing or Rashes

I have seen more people suffer thru a long race due to body chafing than any other reason. This is your third goal of your long paddles. Figure this out for your boat.

Here are several tricks

- 1) In a sea kayak, put several layers of plastic bags on the back of your seat. This will allow the bags to move along each other, rather than your clothes or skin.
- 2) In a surfski, I am always wet. I found that applying the original white Desitin to pretty much my entire bottom and private areas and around my waist and lower back works amazing. It will pretty much ruin your clothes though and you for sure will not look or smell good.
- 3) If you do not want to be as hard core as the original white Desitin, Aquaphor cream or the scent-free clear Desitin also sold at most all drug stores works about half as good, but you will not smell funny and look like a white goo ball.
- 4) Either way, if you are sitting, cream up, you will not regret it
- 5) I always carry a small tube of extra cream in an easy to reach spot on my boat. Apply if you need. There is nothing worse than suffering with open chafing wounds.

### Stomach Issues

This is the number one reason for people dropping out of long races. Here are some tricks to avoid this. **NOTE: You must consult your doctor before using any of these over the counter products. Not all over the counter drugs are safe or work for everybody.** I always carry these 4 over the counter pills with me in my easy access food pouch.

- 1) Imodium AD – (Anti Diarrhea) I take this just before the race starts. Last thing I want is to have to go to the bathroom during a long race. Also helps keeps the stomach easy.
- 2) Zantac – (Ant Acid) – This will really help if you are taking a lot of liquid calories. I take one in the AM before the race. They last 12 hours.
- 3) Tums - (Ant Acid) – I also carry these with me just incase.

- 4) Pepto Bismo pills – (anti-diarrhea) – Also carry this with me just in case, Will take them ever few hours regardless of how I feel.

### Dealing with the Pain

There are 3 types of over the counter medications that can really help with this. NEVER use more than suggested. **NOTE: You must consult your doctor before using any of these over the counter products. Not all over the counter drugs are safe or work for everybody.**

- 1) Anti-Inflammatory – Reducing inflammation can greatly help wrists and joints. Advil is a very common over the counter option.
- 2) Pain Killers – I find these help a lot with aches from sitting. Tylenol is common option.
- 3) Caffeine – Not going to try to explain this one, but often a NoDoz (cup of coffee in pill form) will make me feel better than all other methods.

**Based on what my doctor recommends specifically for me**, I will take a combination of these three spread out over time based on recommended amounts. **You must consult your doctor before considering taking any drug even if it is over the counter.**

### Cramping / Hypernatremia – Salt Issues.

This is actually a reasonably dangerous condition when your body takes in lots of liquids and sweats out all the salt. Massively summarized, your body needs salts (electrolytes) as they allow for the passage of current between the nerves. Remember that grade school experiment where a cup of distilled water is in the circuit of a light bulb and battery. The light will not light up till salt is put into the water, making it conduct electricity.

There are several ways to avoid this

- If you find your stomach only wants to drink water, then you should consider some sort of electrolyte replacement pills. There are many on the market. Personally, I take 1 to 3 every hour depending on how hot it is since I mostly drink just water.
- Eating salty foods such as salted peanuts or summer sausage can help
- There are also many good electrolytes drinks on the market.
- One way or the other you need to make sure you are getting electrolytes. Cramping, weakened performance and in extreme scenarios, hypernatremia all can result from letting this deplete too much.

## Bathroom

This one is quite personal, and I also suggest you figure this one out in your long paddles. Here is what I have experienced

- Many people try to hold it best they can till the checkpoints. Where they just squat in the river and let it happen as soon as they stop.
- Many other just go in the boat and bilge it out. If you do this, make sure you have on a good layer of baby rash or similar cream. This is actually what it was designed for and it does work.
- There is also no shame in pulling off the river if you have to although this will cost you time.

## The Sitting, Your Seat, Bottom, Legs and Stretching

This is a tough one. First off, you absolutely must make sure that you try your seat out for long distances beforehand. I have seen many awesome racers have to pull out due to nerve-related issues and numbness in the legs. This is an issue that simply cannot be overcome if it occurs.

- Play with your seat till you are happy, Then try it out in your longer weekend paddles
- Make sure it does not chafe
- Memory foam, or even Therm-a-Rest squares work very well
- For me what is paramount is the ability to get off my bottom altogether and often. I do this by pushing off my feet to my back rest allowing me to completely lift my bottom from the boat every few minutes without losing a stroke. On a surfski, I always pad the **back** of my seat as well as the bottom for this reason.
- In a sea kayak, I make sure the backrest is not touching me, but can be pushed against without sliding back when I need to do it.
- I strongly encourage people to stretch their legs at every checkpoint. Simple toe touch really helps. I will start all sorts of stretches well before the race as well.
- Additionally, stretching the wrist often is very beneficial. Look up the carpal tunnel wrist stretches on-line. these are the exact ones you will use. If you are just starting out, I would do these every hour when you take your food or drink break at every checkpoint.

## What to Wear

This is going to vary depending on the climate and conditions. Here are several items that I found work though:

- For shorts, I wear PaddleMe sportswear, as many of their products have no seams along the back side. This really helps with chafing. I have a race day only pair with certain areas removed to aid in fast bathroom breaks while paddling.
- If it is very hot/sunny, full white top to cover from sun is a great solution
- If cold and rainy, I found nothing is better than Mysterioso fleece as base layer, life jacket over that, then a light rain shell over your life jacket. You can zip or unzip the light rain shell as you need which may be 10 times over a race (I personally never want to be committed to a rain layer under my life jacket as I would never want to have to stop to take off my jacket and remove or add that layer). When this light rain layer is zipped, because it is over your life jacket, there will be warm pockets of air between you and your base layer.

### GPS or Watch

This one is up to you. I personally though find a GPS or watch for me is mandatory. I use it to make sure I am eating and drinking when I need to as well as space out time between salt and or other pills.

A simple watch will do all the above. A GPS however will give you information such as the following

- Current Speed (Really helps on a river for finding the current)
- Avg. Moving Speed
- Avg. Overall Speed (use with the distance calculator)
- Time of day
- Trip Duration
- Lots of other stuff.

The unit I like currently is the low end Garmin Mapping unit. ETrex 20. REI sells it for \$179: <http://www.rei.com/search?query=etrex+20>

This one is waterproof and will do everything you need. Most important though is it will run for 26 hours on the Blue Energizer Lithium AA batteries making it an awesome tool. You can even load maps on it if you like.