

Coaching Podcast

S7 Ep10 - Good Paddling Technique for a Happy Body with Jamie Greenhalgh

Georgina Maxwell: 0:12

Hello and welcome to this episode of the coaching podcast. My name's Georgina Maxwell and today we have Jamie Greenhalgh. Hi Jamie. How are you?

Jamie Greenhalgh: 0:24

Hi, nice to be here. Thanks for having me.

Georgina Maxwell: 0:26

Excellent. Great. Today Jamie's going to talk about good technique for happy body paddling. So Jamie, before we get into that, would you like to introduce yourself?

Jamie Greenhalgh: 0:36

Yeah, sure Fans of the podcast may have heard me on here before once with Chris. an episode that was probably about a year ago maybe. but for those who've not gone into that one just yet, though, you should definitely do it.

I am a full-time white water kayaking coach. I do a lot of BCAB course delivery. I provide white water safety, white water leader, and white water coach training courses up to advanced level for all of them. I work year-round. also just coaching paddlers from beginner white water kayakers who've literally never sat in a boat before. We're introducing spray decks and telling them how to put them on and take them off up to pretty elite level advanced white water kayakers exploring my backyard area and a lot of other ones. I'm based in North Wales for my kayaking coaching business which is called Paddle 365.

I specialise aside from those BCAB courses in offering guiding across Snowdonia and I come up and visit you in Scotland and do some tourist guiding quite regularly. Paddle 365 has been all over the world as a coaching and guiding brand and feel

very lucky so far to have had pretty charmed career in the industry so far. I love what I do and I'm excited to be here and keep talking to you guys about kayaking because I think it's basically the best thing.

Georgina Maxwell: 2:16

You're right.

It is the best thing ever, isn't it? I feel like we've got so much expertise going on here. So, thank you first for giving up your time.

And what we're going to do is just focus in on how to have a happy body when we're paddling. So, all of that injury prevention to create non-injury and to keep us paddling because that's what we like to do. So Jamie, break it down for us, please.

Jamie Greenhalgh: 2:43

Yeah. Yeah,...

My pleasure. I mean, you're right. Paddling is basically the best thing that any of us can do. Whether we sup, canoe or kayak, we all know that we got into this sport because we love spending time on water. We love the feel of the movements that it creates. And we also want to be able to do as much of it as possible as long as possible. So that's what makes I think conversations like this so important.

I want to start by going back and flipping this on its head. And if we've got good technique for happy body kayaking, thinking about where unhappy body kayaking might come from, where do these injuries come from? And having thought about this generally find that injuries the things that stop paddlers from paddling will be either a trauma related. So maybe you have a crash you're a white water paddler and you have a crash. can't deal with that on a podcast unless we go into a whole sequence about good judgment make and good decision making. And even with that sometimes we're a bit unlucky.

So that's possibly something that we leave for another day and maybe for another guest. The other major way that paddlers get injured is by muscle strains, joint injuries, and that's the route that I think we can really start going down and delving into. I would say that joint injuries and muscle strains tend to come from two things or

we can prevent them from two things. One of those things and a really really important one is going to be conditioning your body. now I'm not a physical therapist. I'm not qualified to give instruction about conditioning your body.

Jamie Greenhalgh: 4:40

But I think if everyone took away the idea that if our body is well prepared for exercise, then it's going to be better at dealing with the toll of that exercise. I think it's pretty uncontroversial. So I'm going to sweep that one to the side as well and leave it for when you get somebody on the pod who is maybe a physio or has a bit of more of a background in that. What I want to focus on is good technique because that is going to be the biggest part that I'm able to contribute.

Jamie Greenhalgh: 5:15

How we adapt our paddling technique from an early stage right up all the way through to expert level to try to take the pressure off of individual joints,...

Individual muscles in the body and create a load sharing mechanism that allows us to paddle for longer harder.

Georgina Maxwell: 5:39

Jamie. that's a brilliant overview. I know for sure if I'm doing a lot of hill walking throughout the winter, which is what I do. my I winter climb and go walking and stuff and I use walking poles and...

Then as soon as spring arrives when I transform my body back into a paddling position, I do get a little bit of sore elbows actually and that's obviously from strain that I'm actually masked using my walking poles and suddenly into a new position it's all feels a bit hard again. so yeah, let's focus in a wee bit onto that upper body and see what you've got for us

Jamie Greenhalgh: 6:20

Yeah, that's great.

Those walking poles that's a great segue and I think actually a nice thing to kind of bear in our minds when we're talking about how we take the pressure off of individual

joints with our paddling because the whole point of the walking poles is we are changing that lower body only exercise and making ourselves into quadrupeds.

And where typically we think of walking as a lower body exercise that's all to do with feet and legs and bums. kayaking is almost the flip side, isn't it? Or paddle sport in general is almost the flip side. We tend to think about it as initially anyway the big thought about paddling especially from a layman's perspective is that it is an upper body exercise.

Jamie Greenhalgh: 7:12

It's all about hands, wrists, elbows, and shoulders. the number one thing that I get, I don't know about you, when I tell people that I'm a kayaker, they say, " you must have very strong arms." It's hilarious.

Georgina Maxwell: 7:27

My mom thinks that.

Georgina Maxwell:

Yeah, she does. Yeah.

Jamie Greenhalgh: 7:31

And what I say is, "No, I don't actually. I have pretty average arms, but I have very good technique."

And that's the basis for this. What I'm going to talk us through is my mantra for creating a system of load sharing that is going to be pretty similar to your idea of having walking poles that support you so that you can use your arms while you're going up the hill. So the things that tend to go on kayakers and paddlers tend to be the and Wrists, elbows, shoulders. and with good technique, that's some of the stuff that we can really immediately start to draw the load away. and a big part of that is load sharing.

So, I want everyone to imagine a line of people all in a chain doing a tug of war. So they're share of the load is being supported by the person in front of them and by the person behind them and together they make each other stronger. but then I want you

to imagine that there is one person who is actually in the chain holding the rope but stepped out to one side. Now that person is pulling but they're pulling in a completely different direction to everyone else in the chain. the person in front of them is pulling harder because they don't have that support.

and the person behind them is pulling in an awkward direction that actually may not anymore be supporting the overall effort of winning that tug of war. so if we think of that analogy of wanting to move all the links in our tug of war into alignment, that's the basis for the next part of this discussion.

Jamie Greenhalgh: 9:31

So, we've got our chain link of the body supporting the paddle stroke. So the first link in that chain is going to be Our hands connect to the paddle shaft. They are the first point of contact. And we know that beginner level paddlers will always put a lot of pressure through the closest hand to the blade in the water. That's across the board. whether you're a paddle boarder, a canoeist, a kayaker, you'll always put a lot more pressure through the closest hand to the blade in the water.

And one of the things that I would say that makes a huge difference to relieving the strain across that whole arm is adding top hand pressure and equalising top hand pressure with the pressure that you're feeling on that lower hand that's really good technique because it A doubles the force you can apply on the blade but B it means that that lower hand is backed up by pressure from the upper hand so that first link in the chain is so incredibly important. We have to make sure that while we're applying pressure to our paddle, we use both hands so there's our starting point. We're using both hands to really back each other up making sure that nothing's out on its own.

Georgina Maxwell 11:12

Great add the next link. Do it.

Jamie Greenhalsh 11:14

Yeah cool, the next link in the chain that I want us to think about is our elbows slightly an odd one, don't know how many paddlers think about their elbows very much. But I spend a lot of time thinking about my elbows because if my elbows are directly in line with the pressure that I am applying through the paddle then I know

that the force that's coming through my hand is going directly straight through my wrist and I am pulling directly in line with my pressure or if it's the top hand I am pushing directly in line with the pressure. If we think back to our focus in the tug of war, by organising my elbows so that it's behind the pressure that my hand is pushing through the blade I know that my first two members of my tug of war are in alignment and their working together.

Georgina Maxwell 14:45

Right great I know we are going to link that into shoulders next but I do have a question for you with regards to the feather of the blade. And all of the stuff you have just spoken about how much does the feather of the blade, as in what blade were using not how much were feathering it. How much with the blade feather effect everything?

Jamie Greenhalgh: 15:09

Yeah, it does affect it quite a lot.

The feather of a paddle gives you the comfortable paddling angle that you can use. So, for instance, when I was young, I did a little bit of slalom.

Never to a particularly competitive level, but that was my route into whitewater kayaking at the very inception. And I was really lucky to be given I bought a second hand but pretty mates rates carbon slalom boat and a carbon paddle and it had a 90-degree feather. That was common back in the day. And the idea was that you could get it incredibly vertical with that 90-degree feather. And by the time you'd turned the paddle back to the other side to get ready to pull it on the other side, because of that huge amount of feather, it would cope with being really vertical through the duration.

The trouble is I got bad wrists and I got bad wrists from it because the angle that my paddle was sitting while I was pulling it through the water, so probably about 45 degrees higher than my lower hand. if I pick up my paddle shaft midway through a stroke, if my paddle shaft's angle is about 45°, but the blade feather is about 90, that's offset from itself. And what you're going to find is quite a lot of cocking of the wrist. Especially if you're doing a lot of drive with the top hand, you're going to be pushing on a cocked wrist.

So I'd say something that is quite technical to describe. I think I'm probably struggling to describe it with clarity and I'm sure some of the members of the listening audience will be scratching their heads. But what I want them to think about doing to really try and make sense of this is go and grab a paddle. Note what the feather is and think I am only going to allow myself to paddle and swap sides while keeping my fist straight. If you have to put yourself in a wrist binder, splint it and then make it so that you can paddle with your fist straight.

What you'll find is that in order to put the blade in the water in the right position on both sides, your paddling angle will have to climb in the more paddle feather you have. So, paddlers who have 30 will be able to hold straight fists while they paddle at a much lower paddling angle with much lower arms than paddlers who have 60° feathers.

If your paddle's up at 60° feather, then what you'll find is that you can keep much straighter fists while you're paddling and you can keep more vertical strokes, which is why freestyle kayakers will tend to favor really low angle or really low feather paddles. And it's also why slalom and Competition creek kayakers will often be up at 55 degrees.

Georgina Maxwell: 18:46

Right. Very interesting.

And also what the paddle's made out of as well. That makes a big difference, doesn't it? So, for instance, I have a glass shaft and a carbon blade. and for me, I love my paddle so much. I feel so well connected throughout everything. and so far, I don't feel like I've got any elbow or...

Wrist twinges at all. So, yeah. I guess trying to find the right paddle is really important.

Jamie Greenhalgh: 19:20

Yeah, absolutely. I am really happy with the paddle I use right now. I have a set of very lightweight carbon cobas and generally I've set them at about 35 degrees at the moment,...

Georgina Maxwell: 19:33

Yeah, I'm on right now.

Jamie Greenhalgh:

Though it's quite rough right now

Because the scale that you turn to change the feather, it's a two-part paddle isn't actually marked with numbers. So, I just have to guess and see what feels right. But I have also in the past if I have been dealing with maybe a bit of strain on one of my joints I have down sized my blade and you can ever make it shorter. Sacrifice a little bit of reach and leverage for something that's slightly lower impacting on your body. Or we can down grade the stiffness of the material that were using. So that if your using full carbon which I am right now if I want to lower the impact on my body I might get a bendier paddle material such as fibreglass or even plastic. If I am dealing with rehab from a strain injury and I really want to paddle, I just want to paddle I might just give myself a plastic paddle to deal with

Georgina Maxwell: 20:41

Do you know back in 2005 when I was out in Norway there was a guy with us who had a wrist injury, he just sent all the 5s with hand paddles. It was amazing to watch and he used to do this thing where he tapped his hands together with his fingers into his palm and that would really trigger me into oh something big's coming up!

Georgina Maxwell: 24:46

That's really good, isn't it? All of that stuff. And you think a while back, everybody's like trunk rotation, torso rotation, all them things. that's good stuff, bad stuff. Is that where the focus should be? Would that help with what you're saying?

Jamie Greenhalgh: 24:58

It absolutely helps with What we're saying and I think those who can I suppose visualise what I'm talking about and have been paddling for a while probably have gone I can't believe Jaime's managed to talk about torso rotation for so long without saying the words torso rotation. but I was building up to it.

And I was building up to it because torso rotation is a really easy thing to say and it's a really hard thing to conceptualise because it doesn't only involve torsos. and there is a lot of organisation of the other limbs of the body that go into what we think of as big concept trunk rotation to power paddling. that we need to focus on the external limbs, the arms and the legs just as much as we need to focus on the core.

And I think that if you tell a beginner you power your stroke through torso rotation, because they've not spent the time organising the way that their arms and their legs move to support and to connect to the trunk, to the torso, even if they turn their body a ton with every paddle stroke, I don't think they'll get the benefit of it. So, when I talk about a fully connected paddle stroke, we're talking about the whole link in the chain, the whole body working to support itself. so yes, trunk rotation, but I would say trunk rotation is the middle and probably the most important person in that tug of war.

But we can't forget those who are at the front and those who are at the back. yeah. Yes.

Georgina Maxwell: 26:59

Yeah. I think one way I try and get the concept over to people is you sit them in the boat on the water and you just hold the paddle and you move the paddle and if just the paddle moves then they're not connected to the whole system. So, if you move the paddle and then the whole boat starts to turn and all this just from you moving their paddle you can see that their feet and everything is connected to the system and it's a strong system for forward paddling and the Good. So, should we move on to your rules of thumb then? What are your rules of thumb? Do you want to try to give a nice, clear, rules of thumb for people to follow?

Jamie Greenhalgh: 27:40

I haven't finished my chain yet.

Georgina Maxwell:

No. you go for that then.

Jamie Greenhalgh: 27:44

All Yeah. Yeah. because it obviously doesn't stop at shoulders, does it? we move from shoulders and then you pointed out surely if the shoulders are going the torso is going and it's going all the way down to the hips and that's the part that I think is the big three the core of our chain so is the upper body everything running from the shoulder line down through the stomach the chest and then down to the hips and that is the big engine it involves

So much in terms of power, muscular capacity. and that needs to be going alongside the hand that's drawing through pushing through the water supporting everything that's in front of it in the chain. further down still we have the legs. now if I put myself in in a kayak because this does apply in s and canoe but in a slightly different way because the legs are differently positioned.

If I put myself in my kayak, I know that by driving one foot, what happens is that leg straightens inside the boat. If that leg straightens inside the boat, the bum moves further back in the seat. I've lengthened my lower body in the boat just on one side by doing that. And if anyone is at home fancies putting their leg up against something and then straightening it while leaving the other side of their body in the same position, they'll notice that their whole torso inevitably turns toward the side that they've just straightened their leg on.

And that's where foot pressure becomes another really key ingredient to adding to that whole system of the body working together to create that turn that powers the stroke. So, it's not the blades being pulled through the water by one link in the chain. It's each part as an individual bit adding its own weight to the system all in line to draw that blade through the water and move the rope if we're going back into the tug of war.

Jamie Greenhalgh: 30:15

I don't know if I've fully exhausted that analogy, but yeah, there are some rules of thumb that I have that I try and make sure I use just to keep myself in check and to make sure that the paddling technique that I have keeps the pressure away from those joints, those really exposed ones at the front of the chain, the wrists, the fists, the elbows, the shoulders. The first one is I never let my arms out rotate my torso. So, this is something that goes into what we were talking about with the shoulders. if

I'm paddling and my top arm comes right the way across to the opposite side of my body without my shoulders turning.

So, imagine that I've put my arm out in front of me and then I'm without bending it just bringing it right across to my opposite shoulder. That arm is directly in front of my chest and it's squashing my chest and my breast. I know there that my arm has out rotated my torso. Okay, my's gone. My chest hasn't. Okay. So, what does that mean for us as paddlers? It means if my arm is out rotating my torso, I'll be pulling quite inevitably my lower hand, my elbow will be behind my chest. That's putting my shoulder out on a limb. It's now going to be under pressure and straining. Okay.

So, in order to paddle with that rule of thumb in check, if I'm going to take a paddle stroke, if I don't have the capacity for a lot of trunk rotation, my paddle stroke probably has to finish somewhere in the mid-thigh area. if we're talking my legs are out in front of me as I draw my blade through the water. If you've got no ability to trunk rotate, my paddle stroke probably finishes somewhere around my thigh in terms of level. that's not a long stroke, But that is a safe stroke. And if you've got no ability to rotate, that's probably where you're going to go. And if you ask any sprint kayaker, they'll tell you that you get a lot of your forward propulsion in that space between your feet and your thigh.

Jamie Greenhalgh: 32:51

If we actually need to pull more pressure through the blade in that single stroke, if you want to paddle behind that point in your body, if you want to continue a stroke beyond your hips, for instance, the only way to do that is you need to fully rotate your torso for it. so that's a really big rule of thumb for me. If you want to paddle behind your hip, you have to turn for it. this should be familiar with people because I think it sits really well with those ideas like the paddle's box.

Jamie Greenhalgh: 33:32

We might talk about a box shape between your fists and creating keeping that space, fists, elbows, and almost like you're keeping a bubble out in front of you between your paddle shaft and your chest at all times while you paddle. If that bubble or the box collapses towards the body or collapses away from the body,

you've put your arms and...Your shoulders in a more exposed position. so yeah, we don't let our arms out rotate our torso.

Georgina Maxwell: 34:10

Very good.

Georgina Maxwell:

I like the last one with the bubble. I've often thought about chopping a hula hoop in half and...

Having this sort of hoop shape in front of me to practice with. I've never put it into practice, but I thought it'd be quite good fun at some point like gluing it in.

Jamie Greenhalgh:

Yeah. Yeah.

Georgina Maxwell:

Yeah. Yeah.

Jamie Greenhalgh: 34:30

It's an interesting one knowing which analogies best describe the strong frame that we're trying to help paddlers to hold while they paddle at all times. One of the ones that I had introduced to me by a client that I really liked was going, "Have you seen Dirty Dancing?" And "What?" Yeah.

Georgina Maxwell:

Yeah. Yeah.

Jamie Greenhalgh:

There's this bit where she's teaching him how to dance. And she goes, hold your hands out. That's your space. This is my space. Don't come into my space." You and you've got to treat your paddle like that.

Treat the share paddle as a ballroom dancer would treat their partner. your paddle has its own space and it needs to be kept away from your body. and by doing that, you're going to be holding a much stronger frame, a much stronger shape,...

Jamie Greenhalgh: 35:25

And you're much more likely to be able to have your body all work with each link in the chain supporting each other with core tension powering the stroke. Yeah, I mean there are a fair number of really key practices that people do miss.

Georgina Maxwell: 35:37

Nice. That's great,...

Jamie. So, I've got one more question for you to lead on there. so what key practices are like kayak or paddlers missing in their early stages which help us out with all of the stuff you've talked about so

Jamie Greenhalgh: 35:55

First of all, I think a good thing for people to do is to think of that chain link of the body as a good way of warming up. and as you get on the water, first go, are my hands both working? Then go, are my elbows behind? Are my shoulders behind? Is my torso working? Are my feet working to support that movement? so that's a great thing to practice and get going on. another thing that I think people are missing a lot these days is the ability to use the blade to stop themselves falling over. bracing has become a bit of a dirty word over the years because, high bracing was, the cause of a good number of little bits of bone and joint injuries over the while.

Jamie Greenhalgh: 36:52

Probably not bone, but definitely some shoulder strains were caused by poor technique in bracing. And it's caused a lot of the instructors and a lot of the coaching community to shy away from teaching it. And I don't think this helps because bracing is a natural instinct. And if you don't know good technique for how to do it, what you're going to do is you're going to revert to bad technique in the moment. So I think we should be actively teaching this. and I've got a few ways that we can look after ourselves while we do it. So, the first one is elbows underneath the pressure. So, if

you're on a low brace, if we take that into the idea, in order to get to a low brace position, from any position that the blade is in, all we need to do is take a good grip on the paddle shaft and flip your elbow up and over the top of the paddle.

Jamie Greenhalgh: 37:44

In doing so, that turns the blade down to face the water so you can pick up some surface tension while you push and it gives you a nice, forwards body position to absorb that stroke in the high brace. There's the other one. if you are going to practice high bracing, you've got to resist the temptation to fall on the paddle from a height because that's the big one. Okay. Don't fall on it from a height. There is absolutely no reason to rest it at the surface and flip towards the blade. The key thing remembering elbow beneath the pressure. if you can flip your elbow beneath the paddle, what that's going to do is it's going to engage the trunk.

Jamie Greenhalgh: 38:38

It's going to start to engage muscles all the way from your fist down that side of your body and you'll find yourself in a much stronger position. The other thing if your brace is out to one side remembering that earlier rule of thumb you have to turn for it. So to safely high brace you need to turn the body and you need to make sure the elbow is beneath the blade. One thing that we then do, okay, and this is the pinnacle of bracing is we need to practice the forwards race. Okay, that's how we turn our high brace into something that actually works to propel the boat and to recover us so what we need to do is learn to do that brace to find that surface tension while the blade is traveling through the water.

Jamie Greenhalgh: 39:30

And the only way to do that is to connect it with a really whole body powered forward stroke. So, something to practice guys is you're going to queue up your perfect forward Get the blade at the centre of the water and allow your edge to move in the direction of the side that you're about to paddle on. As you take your stroke, I want you to think about as you pull, bringing the whole body through the stroke, rotating with the stroke. And as your foot pressures, you also write the boat.

Jamie Greenhalgh: 40:14

So, if we can link the forward stroke with writing the kayak, then it's going to be a really good practice for developing that ability to stabilise. As you get braver and braver with that one, you can start rocking further over and then using that forward stroke to write the kayak. you can begin to do things like ear dips and you can even turn that into your roll.

Georgina Maxwell: 40:30

Nice. ...

Georgina Maxwell:

Jamie, great. So much awesome information there you've given us. We're about to wrap up, but is there anything else you want to add in there before we do? Are you happy?

Jamie Greenhalgh:

Feel like I'm pretty happy.

Jamie Greenhalgh:

Gonna have a nice day, I reckon.

Jamie Greenhalgh:

Yeah. Yeah.

Georgina Maxwell:

Yeah. ...

Georgina Maxwell:

Thank you very much for having you on here and you've done an awesome job. So, yay.

Jamie Greenhalgh:

No, it's been a really nice chatting with you, George. Thanks for asking me back.

Georgina Maxwell:

Nice one. Good job. See you soon.

Jamie Greenhalgh:

Cheers. Yeah.