The Official National Anguilla Club Magazine!

AnguillA

Volume 44, Issue 1.
Summer 2006.

Some of the contents in store!

Read about Steve Cotton's New Zealand wandering

See latest Tackle Tarts review

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THE NATIONAL ANGUILLA CLUB

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Regional Map & Organisers

North West:-
Mr Peter Waterfield
Tel – 01942 746374
e-mail pwaterfield@blueyonder.co.uk
North East:-
Mr Mark Handley Wood
Tel – 0113 2581709
Midlands:-
Mr Jason Morgan
Tel – 01785 255831
Wales:-
Mr Kevin Huish
Tel – 01443 757140
e-mail eeluslf@hotmail.com
South West:-
Vacant
Thames:-
Mr Neil Wilkinson
Tel – 01483 732724
e-mail n_kwilkinson@hotmail.com
East:-
Graham Wilkes
Tel – 01462 629190
e-mail grahamjwilkes@hotmail.com
Southern:-
Mr Steve Ricketts
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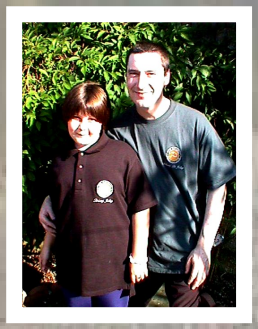

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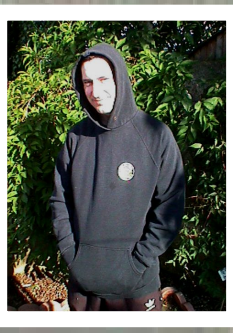

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AnguillA Volume 44, Issue 1. Contents.

"Team Talk"

By Jimmy Jolley.

Hi everyone, I've taken the liberty of starting this "Team Talk" before I've even finished printing the last issue of "AnguillA", that's because I've just ran out of ink and I'm waiting for my wife Jean to return with some refills so I thought I'd just make a start on the next "Team Talk"… (At the time of writing, Damian's PC is still "out of order"… So at some point during this "Team Talk" the magazine editor Damian Wood may take over… so if the context of the page changes… You'll know the reason why).

You may have noticed that we've changed the font style from the usual Times New Roman to Arial… that's because it basically takes up more room on a page… so it bulks the pages better… as I stated in my last "Team Talk"… less content… more pages.... And I don't apologise for this decision, until we start getting more material… that's the way it will be!.

It was quite enjoyable, in a strange sort of way, going back to editing the last issue of "AnguillA" after I thought I would never undertake the role of Bulletin Editor again… I didn't realise just how much I would miss it. I would like to thank a few people here…for their contributions to the last issue of "AnguillA"… I know they will not appreciate the sentiment at all… but I will thank them anyway…. And suffer the consequences when I'm next in their company!

Thanks to Steve Richardson, our Chairman, for his excellent introduction to the "Archive Article" … *How Big is a Really Big Eel?* By Dr Terence Coulson. I'd had that particular article for approximately three years since I received it from Nick Rose (thanks Nick) and for some reason or other it was never used… then, with the rumours of a very large eel being taken from the Colne Valley I "dug" it out for the winter magazine and asked Steve would he do the intro' (when I spoke to Steve about the article he called it "editorial inspiration", but I think it was more like good luck that I'd decided to use it when I did)… and didn't he do the article justice… cracking introduction. And for his Chairman's Page, again thanks… and as for the actual "Archive Article", well what can I say. Only that I agree totally with Steve when he said… ***"His foresight of the possibilities within the realms of eel angling has stood the test of time….and has proved that he was no mere dreamer or writer of myths"***. …So I must also thank Dr Terence Coulson for one of the best "archive articles" it as been my privilege to reproduce within the pages of "AnguillA".

And now a thank you to a guy who has never let us down when it comes to writing something of the mag'… his name is Barry MacConnell… I just do not know how Baz finds the time or the motivation, or indeed the material to write about time after time. The guy is just phenomenal… if you ask him for "a bit of something for the mag'… it will be done!... a well deserved thank you to Barry from the Bulletin Team.

Another contributor that deserves our thanks is John Davis for his "write-up" for the Fish-In's that were held last year at Thorpe Park Lakes and Richmond Lakes. His contribution was informative and also amusing and without his input… we wouldn't have known anything of what happened at any of last years Fish-In's, so thanks again John.

And to Anthony Jolley for the service he provides with his "Internet Resources" ***(I need to make a correction to my "Editor's note" from the last "Internet Resources" piece. I said that it was a follow up to Volume 43, issue 1, it should have read Volume 42, issue 2.. Sorry for the mistake)***… Now Anthony must spend hour, after hour, after hour "surfing" the web for relevant material for the membership to be kept up-to-date with all the developments going on all over the world regarding the decline in stocks of the European Freshwater Eel *(Anguilla anguilla)…* Anthony does not have to do the resources piece, he does it because he feels the National Anguilla Club needs to be informed as to what is out there on the worldwide web… and for his *"A letter to the National Anguilla Club"*… which I hope as got some kind of a response from the membership of the club… so thanks Bro'.

I don't know how many pages we have in this issue … or who has bothered to write them but I will guess it's the same members who have contributed to "AnguillA", Volume 43, Issue 2, the winter issue of the Bulletin of the National Anguilla Club…. Or have answered our pleas in the past… However, I may be wrong, but I doubt that I am… I just can not get my head around the fact that members are **EXTREMELY** reluctant to write **ANYTHING** for **THEIR** club magazine. Why have you all paid £20 subscription fee … (or what ever it is this year) for two magazines that we are struggling to fill with interesting articles and general material that's relevant to specialist eel anglers?

As our Chairman Steve Richardson wrote in his Chairman's Page in the winter issue of "AnguillA"… basically, you don't have to be a Richard Walker, Chris Yates or William Shakespeare to have something published in our club magazine, so why not try to write at least one page for the next publication?…write anything… why not send us a photo of one of your captures?... why not review some item of tackle that you use for your fishing?... why not tell us about one of your successes?… or indeed one of your disasters?... why not send us a members profile of yourself?... (If anyone needs a blank copy of the members profile document just drop me a line and I'll get one sent to you, or give me a call on 01942 862906 anytime!!!.. or there may well be a copy included in this mail-shot)… We don't expect you to write a 20 page essay or anything like that just a few pages of relevant eel "stuff"….or just let us know that you are **still out there** by telling us what you thought of the last issue of the magazine…. Anything will be considered for inclusion within the covers of the Bulletin of the National Anguilla Club "AnguillA". So please help the Bulletin Team as much as you can!!!... I don't know how long we can keep asking for the membership to contribute to the history of the National Anguilla Club… and that's just what the magazine is … a part of the history of our club, so get yourself recorded for all time… its not everyday that you can have your thoughts and deeds immortalised in the club archives for ever!

If you think about it, the editor should have a set number of "permanent" or "guaranteed" pages for each issue of the club magazine, for example:- for one, he should have a "Team Talk" written by one of the members of the production team…. A Chairman's Page by the current Chairman…. Then there should be a Presidents Page in at least one issue per year….A Catch Report for the end of year publication from the Records Officer of the day. …Then the usual Regional Map and the N.A.C Products Page…. And not forgetting the Contents Page…. So that's at least seven pages that the editor should have for every issue, as a starting point. I'm sure the editor would appreciate these "guaranteed" pages being at his disposal for each and every issue of "AnguillA"… I know I would… so why not???...

Well that's just over two pages done, for Damian to get this issue of "AnguillA" underway, so to speak!… I'll tell you all one thing… I wouldn't have known what to write in this "Team Talk" if

the membership **had** started sending material to the editor, I'd have to find something else to "whinge" on about… but I could go waffling on for at least another page… but I won't, I should like to think that the Membership of the National Anguilla Club has got the message by now… if not, then **God help us!!!.....**

So I'll hand this "Team Talk" over to our editor, Damian "The Burglar" Wood to have his say…. So bye for now.

Jimmy Jolley. (Membership Secretary & Bulletin Team).

Thanks to Jimmy for the team talk and for taking over when you where needed, I had to build a new computer to get back on line to do the mag, three motherboards later, new dual processor and a national grid power supply unit all in 64 bit technology and now I'm an adult college student only because of my age!!!!!! Only my luck, two were faulty with me sitting in a hump on the floor wondering why it wouldn't boot up speaking in some ancient devil tongue, rocking!!!!!! My other has been resided to the "Dusty Bin", "Take it back, take it back lads moo!!!!!"

As you can see from the first part of the "Team Talk" we are whinging again and thanking the same bunch of guys again. I will be looking forward to writing or being involved in a "Team Talk" commenting about the events and news in eel fishing and the contents of the mag but at the moment this seems a long way away. We have already got some material from members with a very interesting piece from Steve Cotton with some cool photo's (March). If only we could catch eels this way then eel fishing would be easier!!!!! I am going to start fishing bait on the waters edge in case an eel decides to stick its head out and grab it probably a pegged down rat with a1lb line. I wonder if they do that on occasions over here stick their heads out and grab worms or other items of prey???

Tony's and even Jimmy's article relates the impacted on my fishing, as we have all fished together resulting in myself fishing solitary for a good three or four seasons and I have missed the banter and fishing with Jimmy, especially his brandy flask, waking up in the morning with a head ache an eyebrow missing and wearing lipstick only to find pictures posted on the net, but I don't miss his snoring!!! Over the last couple of seasons I have felt concern's about the loss of their motivation in fishing for eels, I have asked jimmy on numerous occasions to get on the canal for the elusive eels, and found reading both letters quite compelling and worrying considering the great work they have both done and not forgetting other N.A.C members have done for the good of the N.A.C and the welfare of the eels we fish for.

Reading Jimmy's response piece I can to a certain point understand where Tony and Jimmy are coming from, but I see it as our obligation to still fish for eels to educate the masses that want to be educated about the eel, to put the awareness that eels are in danger from over commercial fishing and environmental threat either by pollution or development of its habitats and access points for other profitable gains and something has to be done sooner and not later.

If we didn't fish for eels and fight the good fight, it will in the near future appear on the endangered species list under protection even from any type of fishing for them, is this a good thing or a bad thing for the sake of the eel?? (Are we fishermen or conservationists???? Is there a boundary??? Which order do they come in??? What do the members think??) hopefully this scenario will not happen, then eels would be past tense any way and only finding pictures of them in books or in zoo's with an armed guard in tow, or speaking to old fishermen sat in dark corner's of your local pub reminiscing about battles gone by with these eel thingy bobs (Hopefully they are old fishermen sat in dark corners, be wary of gifts!!!).

May be we are our own worst enemies by not sharing our discoveries and developments or research findings and publishing articles in the public eye as we are such a secretive bunch sometimes for self reasons or from a protection point of view of the waters our targeted eel reside due to known exploitation in the area or unwanted competition from other eel anglers, I know for a fact that night lining goes on in canals in my area for eels as food for their racing greyhounds and whippets on string (See if they can run fast enough being chased by my five stone Irish Staff with attitude and still getting bigger!!!).

But if we can't do it in our own mag without some form of coercion (bullying) or down logging the Team Talk every issue with the same speeches with obviously little or looking at it realistically NO impact, I myself are getting reluctant in writing an article for the mag at times because one issue it was all me because we didn't have enough articles to do half a mag at the time I would like to want to put my article in not have too, to fill the pages. I don't want to be in this situation again and shouldn't be!!

I personally believe another main killer of big eels in our waters is deep hooking, or bad handling by in-experienced or incorrectly education anglers, even some of the big name all round anglers, I have cringed at their attempts to write a good educational eel fishing article, with outdated rigs and theories, or at worst plain ignorance and lack of respect for the species, people who catch them accidentally or even intentionally and still use newspaper to unhook eels before taking it home or whacking it on the head and slinging it up the banking, or worse using illegal fishing methods (Night lining or illegal trapping).

We have members in our club who can do better and basically blow general anglers minds on how far we have come in a technical and environmental aspect; I think it was Mark Hanley Wood who suggested publishing an article a year from the mag at a meeting one year??? I may be wrong, and probably get corrected on this statement, is this a good thing or a bad thing???? The revenue could be used for the book team and less to find for the cost of publication?? This is just an idea and not a suggestion or a statement.

No one said eel fishing was going to be easy either on the fishing front or the emotional frustration of out side influences on our species which at time you feel you are bashing your head against a brick wall and getting nowhere, some things will be out of our control, but not being involved in some way there is nothing you can do about it and at the end of the day we are all involved as members of the N.A.C. and a passion for fishing for eels.

This is why I feel the book is so important to be put into print, it is going to take time to complete but better than just thrown together (Which will never happen with the team who are working on it, but when you see the publication quality of the original 83 Sidley's book, you will understand what I mean and is no different from the green book except of the quality of print, just even rarer!) which I feel this book will surpass any single species book ever written. To me this book will be the modern eel anglers bible, the "Carp Fever" of our time, and may encourage others to fish for the species or some kind of understanding or empathy of the threat it is currently under and fish for the eel with the respect it deserves, maybe not in our life time but who can predict the future? But this is my own personal view of the issue.

Talking of books if you are unaware of this info I was! I have been searching through the EBay website for a friend looking for carp books in particular "Casting at the Sun" which I have

said is rare and very expensive, and at the same time I thought I'll have a look for the "Sidley's" Beekay book "Eels" with the green cover to see how much it was worth today for curiosity sake?

Yes there are still copies available and when I saw the price of the book I was amazed £12.50 and bemused until I realised the publication date which was 2005. Yes they have re-published it, this I didn't know. So if you are looking for the book get on EBay if it isn't there now it will appear again, or is available from a book store. (This is prior to the newsletter Spring 2006)

My copy (Which I won at a raffle when I first joined in 94) and some of the older members who bought the original 1990 first edition is going for £160 at the moment, and the 1983 edition has popped up on the odd occasion for a starting bid of £100 and eventually went for £220, it is a good place to check the value of any books that you may have in your collection for some indication, I am still waiting for the "Perch Fishers", in hindsight I wish I had bought it then for £16 instead of £80 or even more today.

This Winter I have been doing sessions on local waters with Malc "Lucky" Law fishing for big perch which have only showed occasionally, I informed him of my findings of the book who said he had his copy stuck in a locker at work for years, bet it isn't know, most likely stuck in a safe behind a picture with motion sensors and one eye open I bet.

On a different note this will be the last year that I will be editing the "AnguillA" and will be stepping down at the 2007 A.G.M.

So if there is anyone out there who wants to get involved in the mag you have this season to think about it and any advice and help that may be needed I am only on the other end of the phone and so is Jimmy. On another a note the fishin's have been chosen for the forth coming season so if possible if you can attend I hope they will produce to the membership present some good eels and possibilities of winning a few trophies at the Winter Social. For me personally they are a bit to far to travel too living in the North West and I can only push my fishing trolley so far with out taking a rest, hope they all get a good turn out his year.

This season in the press the "Anglers mail" has up to know produced a piece on the biggest eel caught this year so far on luncheon meat by a carp angler from the same area as the thirteen pounder reported last year in the Colne Valley weighing 9lb 01oz naturally with a duff photo, maybe this could be the year for really big eels coming out from all over the country who now's what is lying in your chosen venues this year? I have also found out another 9lb eel that has been taken on halibut pellet by a carp angler who says he is going to target them next season to see what else is in that water this will be interesting to see if he is successful and good luck to the guy! This was featured in the Angling Times with a good photo and looked the eel that the weight portrayed report.

Any way I am going to finish there and hope you enjoy the few pages in this issue of "AnguillA" best wishes.

PS. I would like thank those members personally for contributing to the mag "Thanks guys!!!!"

Damian Wood Bulletin Editor (Bulletin Production Team).

New Zealand Wonderer

By
Stephen Cotton.

My wife daughter and I were lucky enough to visit New Zealand over Christmas and New Year and visited both islands. On the top half of the south island is one of the most beautiful areas I have ever visited; it's called the Abel Tasman National Park. On the edge of this is a small farm which has converted itself into a small nature park - the tourist dollar is worth at least a third of New Zealand's income! Anyway this park is called Bencarri and advertised itself as "the home of the Anatoki Eels since 1914". With an advertisement like that I had to visit! I should mention at this point that on family holidays fishing is most definitely banned. From the brochure supplied on paying the admission to the park I will quote the following:

"Jet black with skin like velvet, the Anatoki Eels are one of New Zealand's oldest tourist attractions. They've been fed in the pristine waters of the Anatoki River since 1914.
Today, we continue to respect and care for this unique wild population of about 50 New Zealand long finned eels. Some of these gentle creatures are nearly 100 years old.
Experience for yourself the relationship between free wild creatures and humans, as you hand feed them blancmange and mince - just as Maggi McCallum first did 90 years ago.
Learn more about these Golden Bay icons and their founders - Maggi and Edna McCallum in our eel museum with audio-visual display".

Enough of the blurb, what was the experience like? Well the park has lots of animals in small paddocks which you can feed by hand...but you are not interested in that! On entering the park there was a small path leading to the river so we followed it. Through a gate the path crossed over a small stream which was approx 8" deep. In the stream next to the path were two large eels over 4 foot long and jet black in colour. The eels appeared to dozing and I was able to stroke them which they seemed to like. We continued down the path and reached the river which was approx 15yds across, clear and rocky, a bit like a northern (UK) game river. At one spot were two young girls who were providing tourists with small pots containing a mixture of raw mince and blancmange? In the river there were lots of large eels the majority of which I would have put in the 10lb to 20lb bracket. I was then to spend the next 30 minutes or so feeding the eels by scrapping a small blob of the mix onto the end of sticks provided for the purpose. Many of the eels appeared to be very old and a good proportion of the larger ones had cataracts in one or both eyes. This didn't stop them feeding however and some of the eels even lifted their heads out of the water to be first in line. Any bits of mix dropped in the water didn't last long as other eels soon sniffed it out. When individual eels became full they gently eased themselves out into the river current and with a small flick of their tails they were gone. Off to digest the food in their lair no doubt. Well the experience was quite awe inspiring and the eels were amazing creatures to view close up. I hope you enjoy the photos *(See page 8*).

As an aside while we were visiting Christchurch I saw a couple of small eels (approx 1lb) feeding in the Avon river, close to a bridge, on a piece of chicken that had been thrown in. The eels were

unable to get the chicken into their mouths as it was too big. The way they fed was to hit the chicken and spin small pieces out of it. One of the eels also picked up the chicken and moved it approx 6 foot downstream before feeding again. After viewing the eels, several frustrating sessions on my local canals made more sense, as at no point would the two feeding eels been hookable, should there have been a hook in the chicken.

Tightlines,
Stephen Cotton.

Below is a sequence of photographs taken at Bencarri within the Abel Tasman National Park in the north of the South Island of New Zealand. Were these amazing Anatoki River Long-finned Eels have been fed and protected since 1914.

"In Response"

This is in response to Anthony Jolley's "A Letter to the National Anguilla Club" piece in the last issue of "AnguillA" (vol 43, iss 2).

By Jimmy Jolley.

When my brother Anthony wrote his letter I know nothing of its contents until he sent it for inclusion in the last club publication. I'd spoken to him at the footie just before I got it (via e-mail). Anthony just said that he'd written it that very morning, and that he thought it would "read" better in the form of a letter to the membership as it may invoke some kind of response, that way, the membership may respond to his "plight", as apposed to if he'd written it in the form of an article.

I can really associate with Anthony's feelings, and for his lack of enthusiasm last season, I didn't even go eel fishing last season. I too have questioned my motivation regarding my eeling over the last couple of seasons. I've found it very difficult to get out and fish. Now I don't know if its because I'm getting older, and its becoming too much of an effort or, that like Anthony, I'm starting to question the ethics of fishing for a species that we have proved is under great threat within the British Isles, Europe and even worldwide…. I really can't tell you the answer at the moment… but it is very worrying that I've lost all motivation to fish for eels, or indeed fish at all, for that matter!!!.

In his letter, Anthony mentions his "Harem Scarem" water. I've actually fish this venue, with Anthony, a good few years ago now and believe me, it really does look very "eely"… very "eely" indeed. I can remember my brother Anthony pointing out to me the swim was he lost his "ghost" the season before. I also remember the expression on his face as he recalled the incident of his loss, he was devastated… utterly devastated.

So, I think that the only way for Anthony, and indeed myself to get back to fishing for eels or in my case, fishing in general is to possibly start fishing together again like we used to when Anthony was very young…. It could just work.

There was so much enthusiasm in his young eyes in those days, enthusiasm that was infectious. We would talk for hour after hour about fishing, lost "ghosts", new and old venues, rigs and tactics… indeed, anything "fishy"…. I've missed those sessions fishing together, I really have!

So we'll just have to see what this season brings, and where it will take us!... hopefully to a season without a blank Catch Return… for myself anyway?....

Jimmy Jolley.

"The Secretary's Bit"

By
John Davis.

It is with great honour that I take this position within the National Anguilla Club. Having joined the NAC back in 1997 I've enjoyed myself being a "grass roots" member going to the AGM's and Winter Socials over the years.

I have especially enjoyed the Fish-In's I've attended and arranged during my time as Social Officer and would like to offer any assistance to our new Social Officer, Barry McConnell and I hope he enjoys the role as much as I have.

It's a real buzz being amongst like minded anglers on the bank, as we Eel Anglers are a bit "thin on the ground"; this is an event in itself when we can out number the Carpers!!!

At this point I would like thank our out going General Secretary, Jason Morgan for his last 12 months and hope I can continue with his, and his predecessors good work in the role of General Secretary.

You, the membership can contact me with anything Eel fishing or indeed anything at all which could concern us, the National Anguilla Club as a group.

Please don't hesitate to get in touch (at a reasonable time please).

Although I am now on e-mail (**john_d_1963@hotmail.com**) so you can always "Drop me a line"…. Anytime!

Editor:

Thank you for your piece and I would like to welcome John to his new role and hopefully he will get all the support from the membership when needed, good luck for the future!!

And to Barry McConnell for his new role of Social Officer, hopefully Bazer will be arranging fishins on some of his secret big eel waters next year; well we can all live in hope can't we!!!!!!!!!

"Tackle Tarts" Review

This time round we are going to look at some of the clothing that is available on the circuit and introduce you to a product that is from the American market like the majority of “Real-Tree” products.

I needed new fishing clothes and luckily came across this item from a company called Stormkloth.

Being a cheap skate I have been after some lightweight waterproof, breathable camouflaged clothing for a while but as you may know looking at the Shimano or Garlands Real Tree Advantage, Prologic Max 4 range they are very expensive starting from £100-£270 for a jacket and £70-£150 for the matching bottoms.

This is out of my price range and probably some of you in the club, with Stormkloth you get the same quality for a fraction of the price, how much is the full kit???

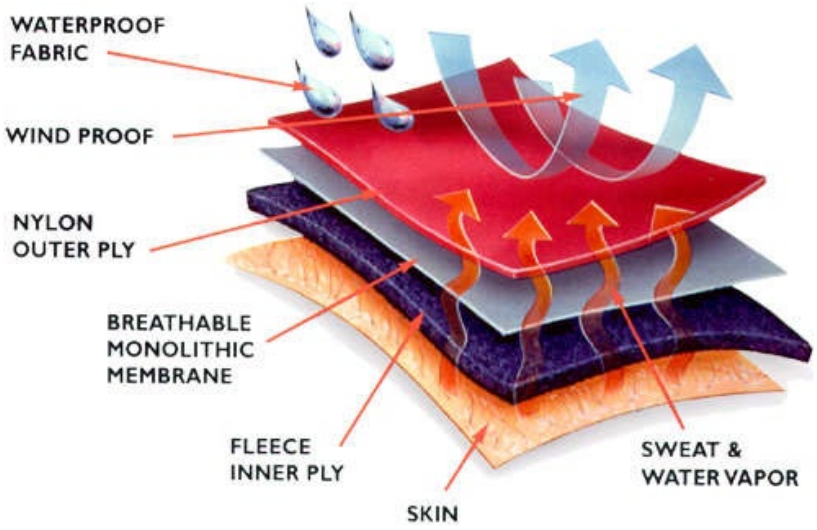
Well for the jacket, pants, balaclava and gloves coming in Real Tree or Mossy Oak it is a staggering **£55.99** plus post and packaging and can be required from **Torbay Angling on 01803 552496** or you can e-mail them on **torbayang@btconnect.com** it actually retails at **£129.99.**

As you can see from the picture to the left if you didn’t know this is me in the full get up, it is made for the deer hunting market and I didn’t realize the popularity of them until I search the net for more details before deciding on getting some, Stormkloth are more famous for making ski clothing and thermal under garments and have their own website showing their products of all ranges and all out door pursuits.

I got mine off “Father Chis” for my Christmas present and as soon as it arrived like a big kid, (Which Jimmy found amusing telling him on the phone) put the full kit on and stood in the shower for 45 mins with a light T-shirt and pants underneath, its first test against a heavy down pour simulation using both shower head setting (Massage and spitting, the rain that gets you really wet, the lengths I go too!!!!).

After taking the clothing off, the outside was wet, but inside I was completely dry “great!!!” It doesn’t take long to dry outside after getting wet.

The outside material isn’t the cheap polyurethane that you get on Kagool’s but more a neoprene type outer shell that is designed for silence due to being predominantly used for hunting and the inside skin is a very light nylon type material.



A technologically advanced fabric with the following properties: Water Repellent, Wind Proof, Breathable, Monolithic Membrane (stores body heat), AMT™ System (wicks away moisture), Flexible (4-way stretch), Fleece Lined, Compact and Lightweight, Wont Ice-up.

In a whole the clothing is very thin in comparison to say Prologic which has a heavy looking neoprene inner, which I feel in the Summer will spend more time slung on the bed in the bivey than actually being warn and wearing the pants you will have to carry some Sudecreme to sooth the heat rash on your nether-regions, Stormkloth is an all season wearing package.

I have used mine all the way through the winter and as you know it hasn't been a proper winter till this year since the 3 day week, yes I'm just old enough to remember!!!

It is obviously not an item of clothing that you can wear in a harsh winter with nothing but your birthday suit underneath and suitable layers have to be worn to keep warm in winter.

Stormkloth is windproof, breathable, 100% waterproof, and non-tear, what else can you ask for in a suit, as you can see from the diagram it explains the different layers and what they do, that makes the suit a fantastic piece of kit to fight the British elements and being as cheap as chips, it's a real bargain.

As I have mentioned before I have stood fishing in the rain (6hrs), wind, snow including the sunny spells we are having at the moment and it is doing well, warm in winter, cool and waterproof in the summer.

The pattern is really desirable to the eye in the real tree pattern as shown and also comes in mossy oak, not my personal favourite pattern but may appeal to some of you and I'm more than happy with my piece of kit. The only thing I can't test at the moment is longevity this will be a while yet. Oh yes! It's machine washable too and can be dried in the dryer so no need to wear for weeks.

The down side to the clothing is that the jacket doesn't have a hood, it would be nice, but instead you get a balaclava (Gimp-hood) with breathing holes at the front and keeps the wind and rain off your face especially in the winter months.

The other issue is the gloves, they are not that great but will keep your hands warm, they don't have waterproof seams and they have leaked, a shame but you can't have everything! They do have a better standard of gloves on the market which I have seen on eBay but over all money well

spent. The funniest thing is that when I got out fishing in the winter with the full kit on walking down to the canal, cars would beep and the locals still knew it was me even with the gimp hood!!!!!!!

See you next time!!!! When we look at matching real tree boots from the TFG range sad I know!!!!

Archive Article

This issue of “Archive Article” as been contributed by Arthur J Sutton a person who has been heavily involved in the N.A.C in the past and future, and an original founder of the club. Arthur is apart of the history of the N.A.C, Getting hold of this article has been fun as it was sent to Jason Morgan first and has travelled a few time until it eventually arrived to me for introduction to the mag hope you enjoy the read.

CONSERVATION

The part I played
By A.J. Sutton.

We hear and read much about conservation nowadays, and we can all play our part – that much I have learned over the past 60 years. I apologise if this article is not exclusively about eels but then neither is conservation!!!

Let’s go back to the late 1940’s, early 50’s. I had been growing a comprehensive variety of broad leafed trees from seed on the two allotments first worked by my father. I was growing so many that I hardly knew what to do with them. Then came a really along great opportunity.

In the late nineteen-forties a large number of fires in that part of Epping Forest that I knew so well had destroyed so many native trees that many thought the forest could not recover, and the danger of barren land being taken for housing development was indeed very real. I had a real interest in the area because of the small forest ponds. But they were now dried-up holes in the ground and one could be forgiven for ever doubting that much wild life had ever existed there. (These ponds were dry because the firemen had to use the water to fight the fires).

Gone were the toads, frogs and newts that were once found in abundance. Then one day, while viewing the “devastation” I got chatting to a forest keeper who I knew quite well. I suggested that if many of the tree stumps could be removed, I could supply several hundred broad leafed trees and, with a little help, could also plan them. The keeper agreed with great enthusiasm and said that he would contact the Forestry Commission to see if extra labour could be made available. It was, and several weeks later, with the contractors digging out the stumps, we started tree-planting in earnest.

We planted oak, ash, hornbeam, willow and hazel. Several hundred of each, some of which I purchased from a nursery in Kent and by mid April the job was done. I also filled one allotment with seedlings many of which could be planted out the following year. I grew many in pots so that they could be planted well after the recognised period for planting and this proved to be a valuable move indeed.

While planting the last few trees the keeper commented on the absence of toads and frogs. This prompted me to visit a large pond where I collected several long strings of toad spawn. The frogs had already spawned so I collected some spawn but mostly tadpoles. With the help of a few allotment holders I got hold of a dozen shallow galvanised trays and these were installed on the allotment. They did not look out of place between rows of seedlings…. a perfect home for tadpoles!

Then it dawned on me that I would not be able to take young toads and frogs back to the forest without there being some water in the otherwise empty ponds. The forest keeper did his bit by getting labour to clear out several drainage ditches… and the weather did its stuff. It rained, boy, how it rained, for the best part of three weeks. I was overjoyed. Not only did the rain help the newly planted trees, but the ponds began to fill. By the time the toads and frogs had developed their legs, our ponds were two thirds filled. They were a good size, having been fed on trout pellets and finely chopped maize.

Came the great day, and four ex-army trucks transported our four-legged creatures to the forest. News had leaked out and quite a few spectators, including the press, watched as we installed the frogs and toads into their new homes. Due to the coverage in the press, a firm came forward and offered us water-lilies and pontamagon which we eagerly planted. The keeper and his men planted bracken around the ponds and two months later, with the ponds now full, I could hardly believe my eyes…. All around was so green. Of course the little toads had left the water but we did see quite a few frogs…. A lovely sight!!!

The keeper installed a few Crucian Carp and helped with a good number of palmate newts. All told a success story in every way. I received a certificate from the Epping Forest Commissioners thanking me for the work I had done…. And of that I am very proud.

When we moved to Hertfordshire I still visited the forest on a regular basis and the last time I saw those trees it was as though they had always been there. The keeper reported toads and frogs all over the place in mid-March.

We then moved to Cheshire. We had a nice bungalow just outside of Nantwich, near to Stapeley Water Gardens. On digging in our garden, I uncovered several large, Black Crested Newts, and wondered where they had come from. At the rear of our bungalow was a water meadow of quite a few acres in size. It was that wet that one needed Wellington boots to walk on it. In the centre was a small copse and, low-and-behold a lovely overgrown wild life pond.

All through the summer my son and daughter studied the wild life in and around the pond. We found common frogs, and marsh frogs and several bullfrogs of an enormous size. The best find of all were the black crested newts, they were lovely creatures and in very large numbers.

Then during thee next winter we learned that the water meadow was to be built on. We met the local councillor and put it to him that the site was of special interest, especially because of the crested newts. He said there was little he could do, although he would try. Just after Christmas we were told that the reclamation of the land was to go ahead, possibly by mid-summer. So we decided that we would get everything ready for a rescue operation on the pond. In early April we could see no signs of life, not a single tadpole. At the end of April we did get a quantity of toad spawn and saw the odd tadpole, but they were so few that we didn't bother with them.

In the middle of May the contractors started moving equipment close to the pond and we thought that it was now or never. So we went to the pond in the hope of at least netting a few of the newts, and we were amazed at what we saw. Tadpoles, great clouds of them, and we took all we wanted. Back home, after a few days we realised that those were no ordinary tadpoles, certainly not frog tadpoles!

They were already growing apace and had developed quite large, feather-like gills. Now I could identify them. They were the tadpoles of great crested news this was wonderful back to the pond in a hurry, to get as many as we could, only just in time as the workmen had already started the filling operation.

One worker told us of the enormous "frogs" they had seen. We actually caught four of them. They were, in fact, North American Bullfrogs, "huge things"! Within two days the pond and surrounding trees and shrubs had disappeared. We were happy with our rescue operation and now had the task of rearing the newts to the time when they could be released. I thought that it would be the following year, but I was wrong. The little creatures grew so fast that we were hard pressed to find enough food for them, HNV boilies were ground up, and Stapeley Garden Centre Angling Section did a roaring trade in trout pellets.

An assistant at the Angling Centre asked why we wanted so many trout pellets. We told him of the vast numbers of newts we were rearing and he suggested four ponds in remote locations which would serve as future homes for the newts.

By mid-October the newts had really grown. Gone were the feathery gills and most of them were already four inches in length. We took half of them to the suggested ponds and released them, which eased our burden somewhat. We were somewhat surprised that none of them tried to leave the water and we sought advice from Donald Clegg, a naturalist of renown, who was a friend of ex NAC member, Jack Bellamy.

Donald told us that the crested newts were far more fully aquatic than any other newt and, in fact, most never leave the water at all. He suggested a winter diet of bloodworms and daphnia, and asked if we could possibly let him have a few crested newts for his own ponds. We obliged, happy in the knowledge that as he owned all own land the newts were going to a permanent home.

The newts took readily to their new diet and by the spring were five to six inches in length. Came the great day when it was time for their release. We travelled to the ponds, together with the young man who had suggested them.

He was a pleased as we were at the release of such a large number of crested newts. We have since heard from him that the ponds are fine and on a worm tied to some thread he actually caught two newts. He said they measured over eight inches in length and this compared with the few we had kept back as “pets”. So, job well done! By the way, that water meadow is now a huge housing estate….. Progress?????

At around this time I was fishing the Shropshire Meres as often as possible. One mere, Blakemere, never yielded any eels and our late member Ernie Orme had spent considerable time fishing for eels there without result. I suggested (naughty me) that we fish the canal which is immediately close to Blakemere for the small eels which abound in the canal, and transfer them all to the mere.

This we did for a couple of seasons, and in that time had transferred an appreciable number of small eels. Those we caught were between ten and twelve inches in length. Several seasons later and Blakemere, as an eel fishery was transformed. Now one could fish there with reasonable optimism, whereas before it was a waste of time.

Then we started to experience catches of good sized eels some, four to five pounds. They could not have been the eels we had put in the mere. But this sort of thing has been highlighted before. Small eels placed in a water and suddenly large eels start to be taken whereas none were taken before.

Since that time we have moved to Lincolnshire where there are (supposable) numerous waters holing great numbers of eels. That may have been true in the past, but not so now! From local knowledge I gather that the eel population has been in decline for the past twenty years. I would dearly love to do some restocking but, today it is frowned upon.

So now, with advancing years, I content myself with growing trees and wild flowers which I plant out regularly. I also, more recently, rear butterflies gathering or in most cases purchasing the eggs and rearing them to the time of there release. This is satisfying as it all takes place within one year.

I wish you all well and leave you with this thought…. If no one does anything, things will surely grind to a halt. Eel fishing will decline to the point where it is no longer worthwhile and its passing will be accompanied by the National Anguilla Club. So do all you can to see that waters get restocked with eels? If you cannot yourself do the restocking, press the authorities to do it. A couple have done so in the past twenty years, so it can and MUST be done.

(Since writing this article I have been involved with a local group calling themselves, “The Toad Watch”. We spend all night keeping watch for toads crossing a busy road collecting them in a bucket or buckets and taking them safely cross the road, even to a water if it is nearby. It is intensive work for up to five nights, but very enjoyable and with very nice company. Lots of hot drinks and plenty of homemade food lots of happy toads… I just wish I could do the same for eels!!!)

Introduction:

I had often thought that eels could swim just as fast if not faster backwards than forwards I was trying to think of reasons why we experience so many dropped runs. One thought I had was maybe the eel was swimming with the bait backwards from the moment the run started and that this could be making it easier for the eel to drop the bait or we could be snatching the bait out of the eels mouth. I carried out my own internet search to see if I could find an answer to this question and found the article below. It has sat on my pc for about 3 years now but an interesting read I think. Hope you enjoy. Anthony Jolley

A Kinematics Comparison of Forward and Backward Swimming In The Eel Anguilla Anguilla part 1:

By
Kristiaan D'Aout and Peter Aerts
Department of Biology, University of Antwerp (U.I.A) Universiteitsplein 1, B-2610 Antwerp, Belguim
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Summary:

In addition to the forward undulatory swimming, eels (and some other elongated swimmers) can swim backwards in a similar way. We compared the kinematics (wave speed, cycle frequency, amplitude local bending and estimated muscle strain) of forward and backward swimming in the European Freshwater Eel Anguilla Anguilla.

Both swimming modes are characteristic by a wave of undulation that travels over the body in the direction opposite to that of swimming. We observed two major Kinematics differences. First, the slope of the wave frequency against swimming speed is significantly higher for backward than for forward swimming. Second, the amplitude profile along the body of the propulsive wave differs greatly. During forward swimming, the yaw at the head is minimal and the amplitude of the propulsion wave increase to approximately 15% (left to right) of total body length towards the tail tip.

During backward swimming the amplitude profile is rather uniform along the body (with value similar to the tail-tip amplitude during forward swimming) resulting in the considerable lateral head oscillation. Strikingly, the head remains approximately parallel to the swimming direction, which presumably enhances visual and acoustic-lateral perception. Furthermore, muscle strain is much higher in the rostral part of the body during backward swimming than during forward. Values for stride length and propeller efficiency suggest that backward undulatory swimming is mechanically less efficient than forward swimming.

We suggest that the typical anguilliform body shape is an important feature that allows these animals to swim backwards using an undulatory mechanism that resembles the forward undulatory swimming mechanism. Most other fishes, if able to swim backwards at all, do so using fins oscillations or undulations.

Key words: Anguilla Anguilla, European Eel, Kinematics, anguilliform swimming, backward swimming.

Introduction:

Most fish have a forward undulatory swimming mechanism that involves a kinematic propulsive wave travelling down the body in the direction opposite to the swimming direction (e.g. Gray, 1933; Lighthill, 1970; Blancheteau, 1972; Webb, 1975; Videler, 1993). The ability to swim backwards is observed in several fish species (Videler, 1993). In many cases, this is achieved by means of oscillations or undulations of the fins while the body axis is kept straight.

However, some fish species swim backwards by 'reversing' the forward, undulatory swimming mechanism. The lateral body movements, at first glance, strongly resemble those seen during forward swimming. Backward undulatory swimming seems highly functional: it is frequently used during escape manoeuvres and it is observed in species living in darkness and in dense vegetation, where it allows the animal to reverse rapidly along the path already travelled and tested.

However, it has only been described for a few species, e.g. eels, moray eels, congers (Videler, 1993), the marine lamprey *Petromyzon marinus* (Courtland et al., 1998) and the catfish *Channalabes apus* (K. D'Août, personal observations). All these species have slender bodies and a forward swimming mechanism defined by Breder (1926) as anguilliform (after the genus *Anguilla*): more than half a complete wave is present on the animal's body at any instant during swimming. Despite their status as model species, eels, but also other anguilliforms, have been paid relatively little scientific attention, particularly in terms of detailed kinematic descriptions.

Gray (1933) first filmed anguilliform swimming movements in a juvenile (7 cm) *Anguilla Anguilla* (then *A. vulgaris*) and three other fish species. However, it is only recently that the kinematics of anguilliform swimming has been studied in detail (*Anguilla rostrata*, Gillis, 1996, 1998a; *Siren intermedia*, Gillis, 1997; *Ambystoma mexicanum*, D'Août and Aerts, 1997). Aspects other than kinematics, such as muscle activation patterns (Grillner and Kashin, 1976; Williams et al., 1989; D'Août et al., 1996; Gillis, 1998b), neural control (e.g. Williams, 1992; Grillner, 1995), hydrodynamics (e.g. Carling et al., 1998), body dynamics (e.g. Bowtell and Williams, 1994) and body stiffness (Long, 1998) of anguilliform swimmers have been studied to a greater extent (see also Discussion).

Data in the literature on the kinematics of backward undulatory swimming are lacking completely. However, at least in the anguilliform lamprey, the neural stimulation pattern during backward undulatory swimming is known to be an exact, but reversed, replica of that observed during forward undulatory swimming (Grillner, 1996). Are the kinematics identical too? This is not necessarily the case, since kinematic patterns arise from complex interactions between the neural stimulation pattern, myofilament action, hydrodynamics, the animal's body properties and feedback mechanisms (Carling et al., 1994).

The present study provides the first kinematic description of backward swimming with lateral body undulations. We used the European eel *Anguilla Anguilla*. Forward and backward swimming kinematics is compared quantitatively. Furthermore, muscle strain at different locations along the body is estimated during both forward and backward swimming. On the basis of these results, we discuss why anguilliform fish show this swimming mode whilst most other fish probably do not and the implications of this swimming mode for body morphology, ecology and neuromotor control.

Materials and methods

European eels, *Anguilla Anguilla L*., were wild-caught from a brook using electric fishing (Cowx and Lamarque, 1990) (*N*=3; total body length *L*=0.220±0.019 m; snout–vent length 0.091±0.007 m; mass 12.95±4.16 g; means ± S.D.). They were kept in a freshwater aquarium for several weeks prior to the recording sessions. During the recording sessions, fish were placed in an arrangement consisting of two open aquaria, interconnected by a closed glass tunnel (height 0.1 m; width 0.15 m; length 1 m) with a 0.05 m reference grid on the bottom and the back wall. A front-surface-coated mirror was placed at 45 ° above this tunnel to permit simultaneous lateral and dorsal views of the animals as they swam from one aquarium to the other.

Water temperature was 18–22 °C during both the acclimation period and the experiments. One eel was killed using an overdose of MS-222 (Tricaine, Sandoz) and hung in a freezer by attaching a wire through the snout to maintain as closely as possible the body shape in water since eels compress dorsoventrally when lying on a flat surface. When frozen, the width of the eel was measured at fixed intervals (5 % of total body length) using callipers. These widths (Fig. 1) were used to estimate muscle strain (see below)

The animals were video-taped using a Panasonic F-15 camera (50 fields s-1) connected to an S-VHS recorder. The lens was adjusted to show both the lateral and dorsal views for several complete swimming cycles. For analysis, only rectilinear swimming trials consisting of at least three complete cycles at a constant speed (i.e. with rectilinear time *versus* displacement curve) were used. In total, 22 forward and six backward undulatory swimming bouts were selected for analysis. 'Forward swimming' and 'backward swimming' refer to undulatory forward and backward swimming, unless stated otherwise.

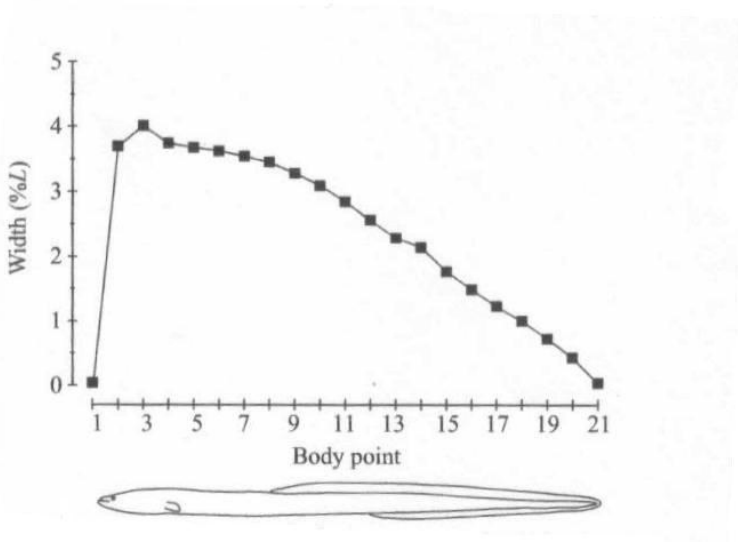


Fig 1: The body width is a fraction of the total body length, *L*, measured for each body point on a representative individual. The body points were at 5%*L* intervals. Body width is used for calculation of the lateral strain (See also fig3 :).

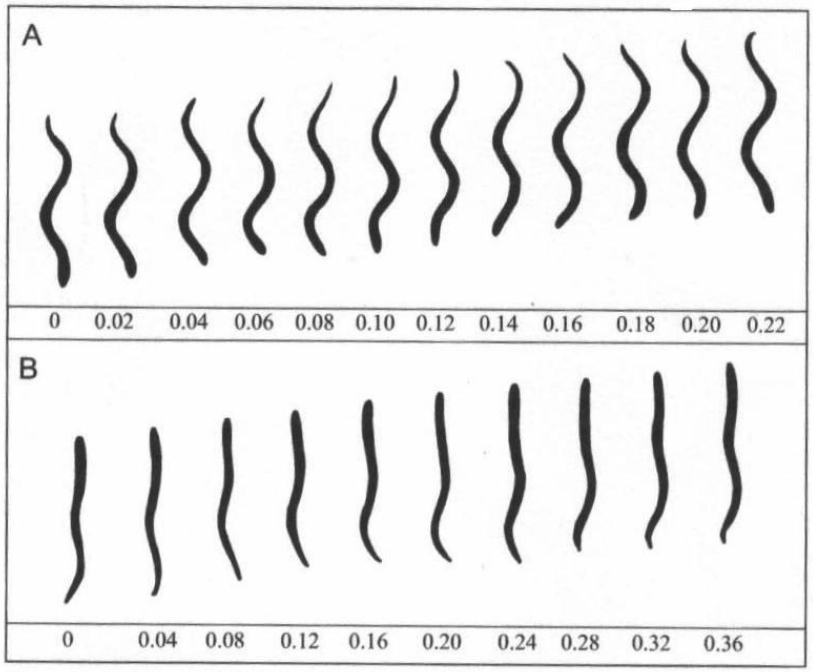
For further analysis, only the dorsal views of the swimming sequences were used (Fig. 2) since the animals swam at the bottom in all the sequences analysed, which is their normal behaviour in aquaria and is also observed in *Anguilla rostrata* and *Siren intermedia* (Gillis, 1996). For each frame, the dorsal midline was digitised using a NAC-1000 *x*, *y* coordinator connected to a computer. Previous investigations in our laboratory have shown that digitising the dorsal midline directly, instead of calculating it from the digitised body contour does not have a significant influence on the output of the kinematic analysis.

To the raw data files, consisting of sequences of dorsal midline coordinates (approximately 100 coordinate pairs per frame), the following procedures were applied. (1) An equal spacing procedure in which the animal's posture in each frame is described by means of 20 segments of equal length, delimited by 21 points that are referred to below as the 'body points', point 1 being

the leading end during swimming, i.e. the snout during forward swimming and the tail tip during backward swimming. (2) A search algorithm for the least oscillating body point. A linear regression through the path of this body point defined the swimming direction.

(3) Transformation of the body points to a frame of reference in which the vertical axis coincides with the swimming direction. Normalised plots of the body postures (each frame shifted a known distance to the right) were made. A number of measurements were made from these plots from which the desired kinematic data were obtained (modified from Videler and Wardle, 1978; for more details, see D'Août and Aerts, 1997). The variables studied were swimming speed *U* (m s-1), wave speed *V* (m s-1) and cycle frequency *f* (Hz). For two representative sequences of both forward and backward swimming, a more detailed analysis was carried out. These four sequences were selected because they had comparable cycle frequencies (forward swimming, 1.77 Hz and 1.86 Hz; K. D'AOÛT AND P. AERTS.

Fig 2:



Dorsal-view contour plots of approximately one cycle of backward (A) and forward (B) undulatory swimming in *Anguilla Anguilla*. Both sequences are from the same individual (total body length, *L*=0.201 m) swimming with a comparable cycle frequency. Nevertheless, the swimming speed attained is higher during forward swimming. Forward undulatory swimming speed 1.58 *L* s-1, wave frequency 4.06 Hz; backward undulatory swimming speed 1.34 *L* s-1, wave frequency 4.17 Hz. Frame intervals (s) are given below the plots. Note also that the lateral amplitude is much higher in the rostral part of the body during backward swimming than during forward swimming.

Backward swimming, (1.83Hz and 1.88Hz). Additional variables studied for these sequences were the amplitude *A (m)* of the 21 body points and the angle a (rad) between successive body segments at body points 2-20. Where appropriate, *U* and *A* were scaled to the total body length, yielding specific speed ***Usp*** *and specific* ***Asp****, respectively.* The maximal amplitude *A* (the maximal lateral deflection mid-position) was determined for every body point; the graph representing these amplitudes as a function of position along the body is referred to as the amplitude profile. The time profiles of the angles between subsequent body segments were smoothed using a fourth-order zero-phase-shift Butterworth low-pass filter (described in winter, 1990). On the basis of these profiles, and on the body width at the corresponding body point, we estimated the strain cycles at the lateral side of the body.

We calculated the strain (i.e. the extent to which the muscles at any position stretch and shorten around its mean length *L*0 during swimming) at all body points except point 21 (the tail tip) and the first four points, representing the inflexible head. We used a simple geometrical model assuming

that muscle strain is proportional to the radius of curvature (calculated from the angles described above) and to the width of the body at the particular body position, strain being higher when the body is more curved (i.e. large angle and short radius of curvature) and wider (Fig. 3).

The body axis is considered incompressible, hence *l* (the length of one body segment) is also *r*a, where *r* is the radius of curvature and *a*, is the angle between two adjacent body segments. If *D* is the body width at the body point concerned, the length of the convex side of the body segment is then $\boldsymbol{L}+\Delta\boldsymbol{L}=(r+D/2)a$; the length of the concave side is $\boldsymbol{L}-\Delta\boldsymbol{L}=(r-D/2)a$. Relative strain is then

$\Delta\boldsymbol{L}/\boldsymbol{L}=D/2r$, with $r=0.05L/2a$; thus, $\Delta\boldsymbol{L}/\boldsymbol{L}=Da/0.05L$. This technique has been used previously (Rome et al., 1988; Rome and Sosnicki, 1991) and its results have been verified by the independent technique of sonomicrometry (Coughlin et al., 1996). Strain is given as the percentage shortening or lengthening of the muscle around its mean length L_0. For example, if strain is 10 %, muscles shorten from (L_0-10 %) to (L_0+10 %) and therefore have a total movement range (shortest to longest length) of 20 % of mean length. Absolute values for strain can be interpreted quantitatively for the red muscle fibres, which run rostrocaudally closely under the skin surface and parallel with the body axis (Hulbert and Moon, 1978a, b). The white muscle fibres are situated more medially and have a complex architecture (Alexander, 1969).

Hence, the strain calculated here should be interpreted qualitatively only, i.e. as an estimate of strain differences between different body locations or between forward and backward swimming. Absolute values cannot be calculated since, in the eel, the white muscle's gear ratio (Rome and Sosnicki, 1991; Rome, 1994) is unknown (see Discussion).

The mechanical efficiency of swimming was calculated on the basis of the kinematic data from all 28 sequences.

Lighthill's (1960) elongated body theory is used widely because of its computational simplicity and because it has proved to give accurate estimations in quantitative terms (e.g. Liu et al., 1996). However, some assumptions of this model, in particular that the amplitude should increase towards the trailing end, do not apply to backward swimming (see below).

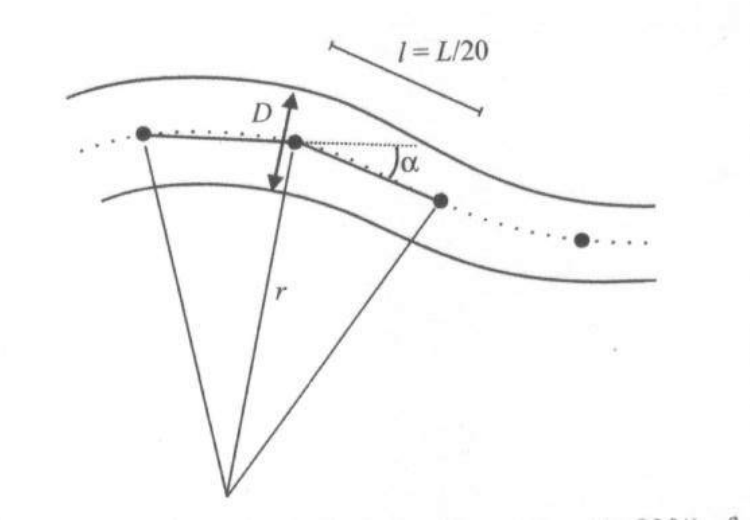


Fig 3: Schematic representation of the part (Approximately 20% of an eel body in the dorsal view illustrating how strain was calculated, $\boldsymbol{L}$, length of the body segment (=L/20) (m); L, total body length (m); D, width of the body (m); r, radius of curvature (m); a, angle between adjacent body segments (rad).

Since our aim was to compare forward and backward swimming efficiencies, we chose not to apply the elongated body theory, but to focus on two more-trivial estimates of mechanical swimming efficiency, propeller efficiency and stride length. Propeller efficiency (or slip factor) is defined as U/V. At a propeller efficiency of 1.0, slip would be zero and efficiency maximal. Stride length is the distance travelled during one complete swimming cycle (i.e. during one tail beat cycle; Videler, 1993). It is assumed that the longer the stride, the greater the efficiency.

Results:

Eels swim backwards when manoeuvring in complex environments and when disturbed at the rostral side of the body. During our experiments, they performed up to eight backward swimming cycles before resting or, following a sharp turn, switching to forward swimming. Both forward and backward undulatory swimming are characterised by a kinematic wave of lateral bending from the leading end towards the trailing end of the animal (Fig. 2). In both cases, there is always more than half a complete wave present on the body of the animal, and the kinematics, not surprisingly, fit into Breder's (1926) category of anguilliform swimming.

The observed swimming speeds are given in Table 1. Mean forward and backward swimming speeds (0.186 and 0.181ms-1, respectively) are not significantly different, and the ranges of observed speeds show a wide overlap. Blaxter (1969) considered a relative forward swimming speed of 1.9 *L* s-1 to be 'sprint speed' in eels, and our data on forward swimming (up to 1.582 *L* s-1) therefore cover almost the complete range of sustained and prolonged swimming speeds.

Table 1. *Observed absolute and relative swimming speeds during forward and backward undulatory swimming of* Anguilla anguilla

	Forward swimming	Backward swimming
U, range ($m\,s^{-1}$)	0.0935–0.318	0.099–0.266
U, mean ± S.E.M. ($m\,s^{-1}$)	0.186±0.064	0.181±0.056
U_{sp}, range ($L\,s^{-1}$)	0.263–1.582	0.450–1.325
U_{sp}, mean ± S.E.M. ($L\,s^{-1}$)	0.821±0.364	0.894±0.291

U, swimming speed; U_{sp}, length-specific swimming speed; L, total body length.

It should be noted, however, that much higher speeds can be reached, as measured by other authors (Grillner and Kashin, 1976; Wardle et al., 1987). During both forward and backward swimming, cycle frequency (or tail beat frequency) increases linearly with specific swimming speed (Fig. 4), the regression equation for forward swimming being *U*sp=0.513*f*-0.56 (r^2=0.89, *P*=6.1´10-¹²). For backward swimming, the regression equation is: *U*sp=0.316*f*-0.02 (r^2=0.85, *P*=0.004).

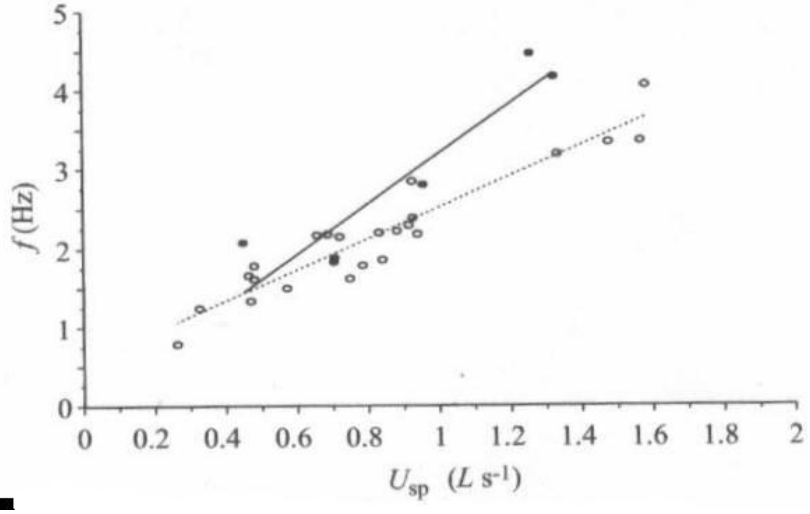
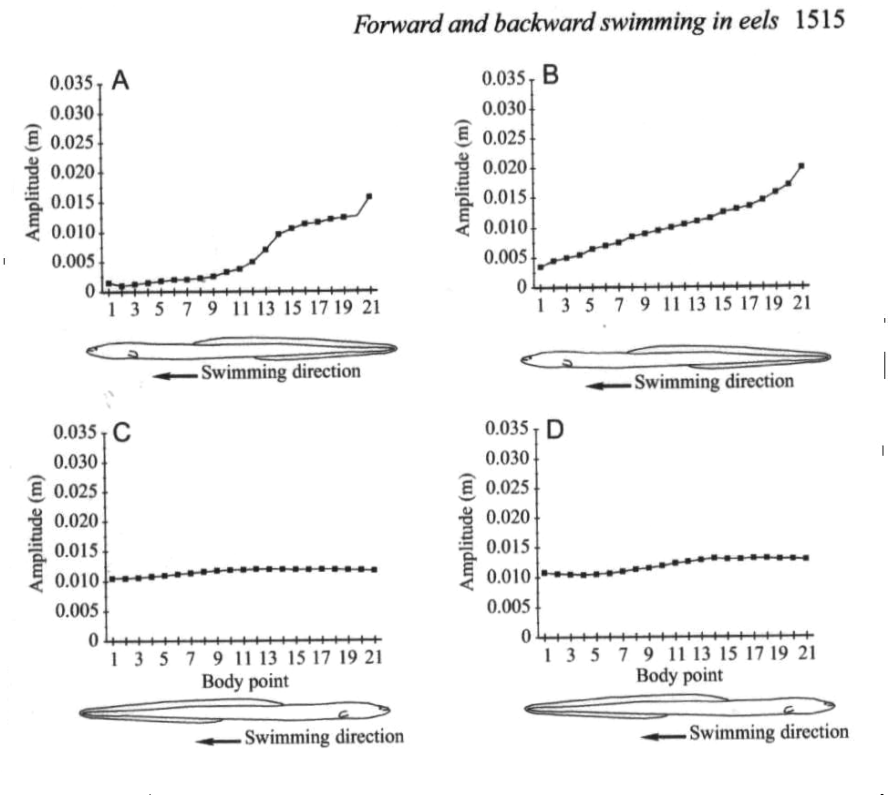


Fig 4: Cycle frequency (*f*) as function of length-specific swimming speed (***Usp***). Filled circle and solid line, backward swimming; open circles and dashed line, forward swimming ***L***, total body length. Regression equations are given in the text.

Clearly, during backward swimming, this relationship has a significantly lower slope (analysis of covariance: $F_{1,26}$=7.87, *P*=0.009), and thus, for all but the lowest speeds, a higher frequency is needed to reach the same relative swimming speed. As a result, the distance travelled within one cycle (the stride length) is smaller for backward swimming (see below).

The amplitude of the propulsive wave at the tail tip is not very different in forward and backward swimming and, in both cases, does not correlate significantly with swimming speed.

Fig 5:



Example amplitude profiles for the two sequences of the forward swimming (A, U_{sp} +0.48 Ls^{-1}; B, =0.841 Ls^{-1}) and two backward swimming (C, U_{sp}=0.70 Ls^{-1}; D, U_{sp}=0.71 Ls^{-1}). U_{sp}. Length-specific swimming speed; L, total body length point are at 5%L intervals. The swimming direction is illustrated by the eel outlines below the graphs.

The respective tail tip amplitudes are, with values of 7.56±0.28%*L* (mean ± S.E.M., *N*=22) for forward swimming, and 7.05±0.61%*L* (mean ± S.E.M., *N*=6) for backward swimming, not significantly different (two-tailed *t*-test, *P*=0.19). Snout tip amplitudes differ more. During backward swimming, snout tip (trailing end) amplitude is 4.59±0.77%*L* (mean ± S.E.M., *N*=6), which is smaller than the trailing end amplitude during forward swimming (one-tailed *t*-test, *P*<10-6), but considerably higher than the snout tip amplitude during forward swimming, which is almost zero (see Fig. 9A).

Trailing-end amplitude is used widely as an indication of overall amplitude since, for many fishes; there is a characteristic amplitude profile from head to tail. However, this *is not always the case (See Discussion). Our eel data shows drastically different amplitude profiles* for forward and backward swimming. During forward swimming, the amplitude is minimal at the leading end (the snout tip or immediately behind it), increasing more than fivefold to reach a maximum at the trailing end (tail tip) (Fig. 5A, B).

However, during backward swimming, a totally different profile is observed. Amplitude does not decrease drastically towards the leading end but remains at a high level along the whole body length (Fig. 5C, D). Thus, the amplitude at the tail tip is comparable during forward and backward swimming, whereas the snout shows considerable lateral deflections during backward, but not during forward, swimming (see also Fig. 2). The fact that the amplitude profile differs between forward and backward swimming has important consequences for the angles between adjacent body segments (or, alternatively, for the radius of curvature). As can be seen from Fig. 6A,B, the maximal angles during forward swimming are typically small at the leading end and increase steadily towards the trailing end. The peak angle is found at body point 19 (90%*L*).

However, during backward swimming (Fig. 6C, D), the peak occurs at body points 10–11, i.e. just behind the anus, which is located in the segment between body points 9 and 10. Towards both

the leading and trailing ends, the maximum angle gradually decreases by approximately 30–50 % of this maximal value. Comparison of the body segment maximum angle profiles for forward and backward swimming (Fig. 6) indicates that the greatest differences are found in the rostralmost part of the body, where they are larger during backward swimming, and in the caudalmost part, where they are larger during forward swimming.

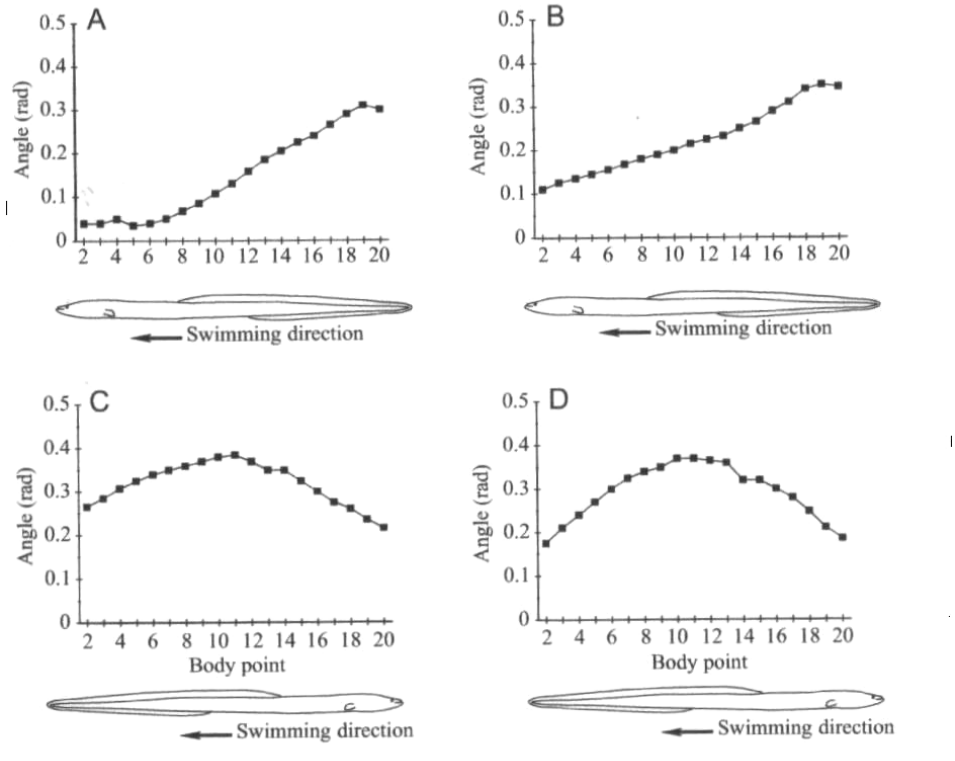
Both the amplitudes and angles described above are the maximal values found over a swimming cycle. Between these maxima, both variables vary approximately sinusoidally, as can be seen in Fig. 7. However, the two curves are not necessarily in phase. As can be seen in Fig. 7A,B, during forward swimming, maximal angles precede maximal amplitudes by approximately 20 % of the cycle period at the35%*L* location (body point 8) and by approximately 10 % of the cycle period at the 65%*L* location (body point 14).

This phase difference is similar to that described in forward swimming *Anguilla rostrata* (Gillis, 1998a), and it has been argued that this is a physical requirement of travelling waves with increasing amplitude (Katz and Shadwick, 1998). During backward swimming, the maximal amplitude does not increase towards the trailing end (see above) and, therefore, the phase relationship between the angle and amplitude curves differs. Phase differences tend to be smaller than during forward swimming, ranging from the maximum angle preceding the maximum amplitude by approximately 15 % of the cycle period to the maximum amplitude preceding the maximum angle by approximately 10 % of the cycle period. Using a simple model (see Materials and methods and Fig. 3), muscle strain during forward swimming is calculated to be highest at body points 8–14, i.e. at 35–65%*L*, and is up to four times higher than strains found caudally and rostrally.

Fig 6:

Maximal angles between body segments, measured for body points 2-20 (body points are at 5%L intervals, where L is total body length). (A, B) Forward swimming sequences (U_{sp}=0.48 Ls^{-1} and 0.841Ls^{-1}, respectively);

(C, D) backward swimming sequences (U_{sp}=0.70 Ls^{-1} and U_{sp}=0.71 Ls^{-1} respectively). U_{sp}, length-specific swimming speed. The swimming direction is illustrated by the eel outlines below in the graph.



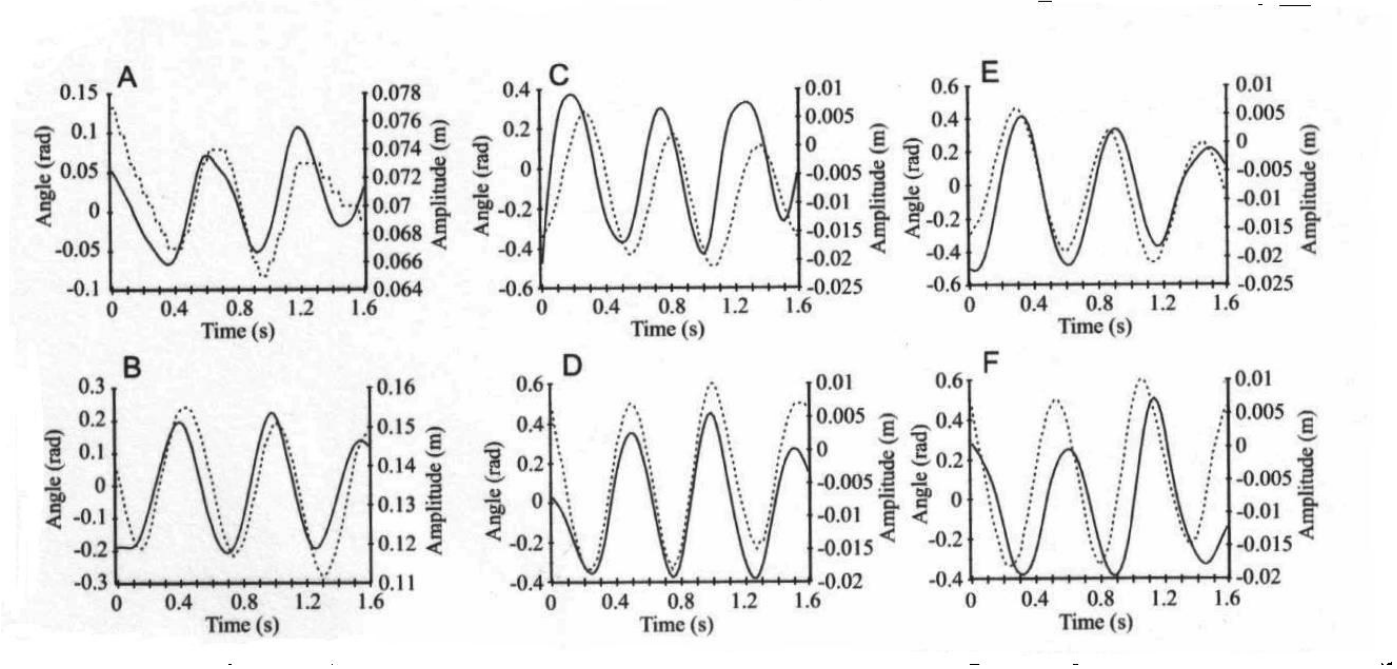
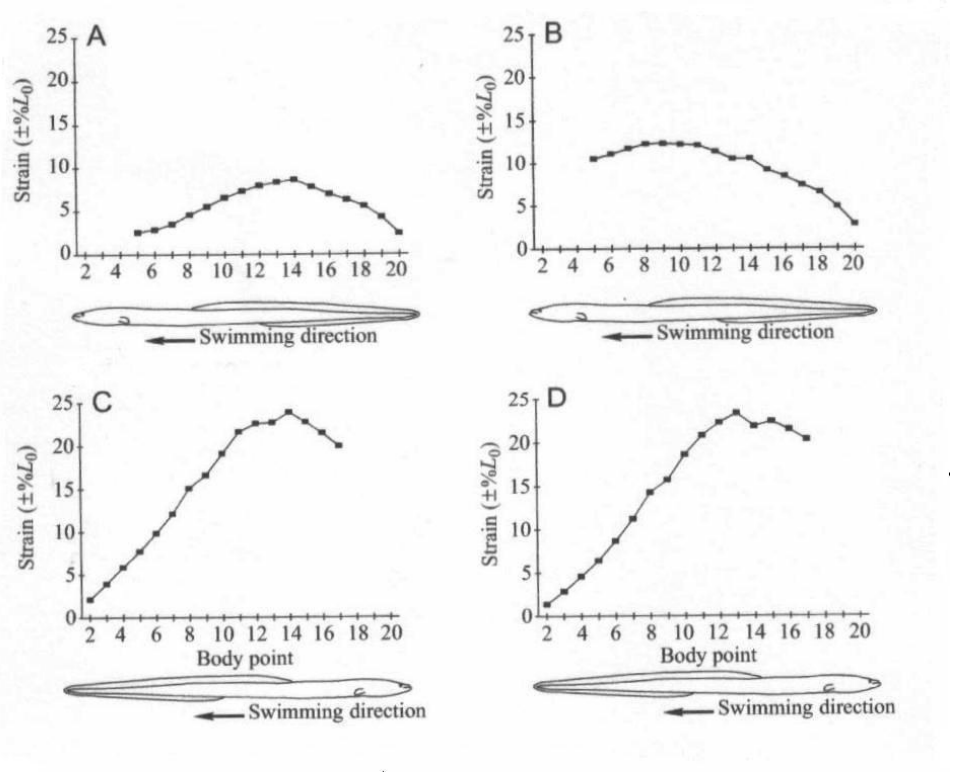


Fig 7: The relationship between body curvatures (solid curves) and amplitude (dashed curves) during undulatory swimming in Anguilla Anguilla. (A, B) Forward swimming at U_{sp}=0.48 Ls-¹; (C, D) backward swimming at U_{sp}=0.70 Ls-¹; (E, F) backward swimming at U_{sp}=0.71 Ls-¹. (A, C, E) body point 8; (B, D, F) body point 14. These body points were chosen because they are 35% from the leading or trailing end, respectively, and thus allow a direct comparison between forward and backward swimming trails. Note that, during forward swimming, maximal angle precedes maximal amplitude at both body points. During backward undulatory swimming, however there is no clear relationship (See results). U_{sp} length-specific swimming speed; ***L***, total body length.

Fig 8:

Estimated muscle strain as a function of position along the body. (A,B) Forward-swimming sequences (*U*sp=0.48 *L* s-1 and 0.841 *L* s-1, respectively); (C, D) backward swimming sequences (*U*sp=0.70 *L* s-1 and 0.71 *L* s-1, respectively). *U*sp, length-specific swimming speed; *L*0, mean muscle length; body points are at 5%*L* intervals. The swimming direction is illustrated by the eel outlines below the graphs.



Phases of the Moon Codes

Intro:

As you are aware this section has appeared in the AnguillA mag before but I have kept the entire original context due to having new members join this year the only difference is an up to date moon phase chart for the forth coming eel season 2006.

The table gives the date and time (Greenwich Mean Time) of all phases of the Moon for the indicated period. This data is provided primarily to assist in historical research projects. For the year 2000, the length of the mean synodic month (New Moon to New Moon) is 29.53059 days.

Delta T is listed in the last column on the right. This is the value used to convert Ephemeris Time to Universal Time (i.e. – Greenwich Mean Time) in the tables. Estimated values for other times are based primarily on historic eclipse records (past) or extrapolation of current rates (future):

The table also indicates whether or not an eclipse of the Sun or Moon occurs on the date in question and gives the eclipse type. Note that an eclipse of the Sun can occur only at New Moon, while an eclipse of the Moon can occur only at Full Moon. In any calendar year there are between 2 to5 eclipses of each kind (solar and lunar, including penumbral). However, there cannot be any more than 7 eclipses in any one year (4 solar and 3 lunar, or 5 solar and 2 lunar).

Solar			**Lunar**		
Eclipses:	**T -**	**Total**	**Eclipses:**	**t -**	**Total (Umbral)**
	A -	**Annular**		**p -**	**Partial (Umbral)**
	H -	**Hybrid (Annular/Total)**		**n -**	**Penumbral**
	P -	**Partial**			

Algorithms used in predicting the phases of the Moon as well as eclipses are based on Jean Meeus' *Astronomical Algorithms* (Willmann – Bell, Inc., Richmond, 1991). All calculations are by **Fred Espenak (USA),** and he assumes full responsibility for their accuracy.

Definitions: from the Oxford English Dictionary.

Penumbral: An imperfect shadow, in an eclipse a partially shadowed region which surrounds the full shadow.

Umbral: A Region of complete shadow due to obstruction of light by an opaque object, ESP. shadow cast by moon onto earth during solar eclipse, or a darker inner region of sun spot.

Annular: Ring shaped.

2006									
Year	New Moon	Time	First Quart	Time 2	Full Moon	Time 3	Last Quart	Time 4	De
2006			Jan 6	18:56	Jan 14	09:47	Jan 22	15:14	00
2006	Jan 29	14:15	Feb 5	06:28	Feb 13	04:44	Feb 21	07:17	
2006	Feb 28	00:32	March 6	20:15	March 14	23:35 n	March 22	19:10	
2006	March 29	10:16 T	April 5	12:01	April 13	16:41	April 21	03:28	
2006	April 27	19:45	May 5	05:13	May 13	06:52	May 20	09:20	
2006	May 27	05:27	June 3	23:06	June 11	18:04	June 18	14:08	
2006	June 25	16:06	July 3	23:06	July 11	03:03	July 17	19:13	
2006	July 25	04:31	Aug 2	08:45	Aug 9	10:55	Aug 16	01:52	
2006	Aug 23	19:09	Aug 31	22:56	Sept 7	18:43 P	Sept 14	11:17	
2006	Sept 22	11:45 A	Sept 30	11:03	Oct 7	03:13	Oct 14	00:26	
2006	Oct 22	05:13	Oct 29	21:25	Nov 5	12:58	Nov 12	17:46	
2006	Nov 20	22:17	Nov 28	06:29	Dec 5	00:24	Dec 12	14:32	
2006	Dec20	14:00	Dec 27	14:48					

By
Anthony Jolley

A Kinematics Comparison of Forward and Backward Swimming
In The Eel Anguilla Anguilla part 2:
By

Kristiaan D'Aout and Peter Aerts
Department of Biology, University of Antwerp (U.I.A) Universiteitsplein 1, B-2610 Antwerp, Belguim
Accepted 3 March: published on WWW 6 May 1999.

(Fig 8A,B). This is due to both the similar maximum amplitude found rosterally. (Fig 5A,B) and to the smaller body width found (Fig. 1). During backward swimming (Fig. 8C,D), strain differences between different body points are even more pronounced, with a more than tenfold difference along the body, mainly due to very high strains (±23–24 %) around body points 12–14, i.e. at 35–45%*L* (thepre-anal region). It should be stressed that our strain values are probably good estimates for the red muscles, which have a gear ratio (see Rome, 1994) of approximately 1.0.

However, for the white muscles, our strain values are likely to be overestimates (see Discussion) and should not be interpreted in absolute terms. Comparison of the forward- and backward-swimming strain curves shows that muscle strain differs most in the rostral half of the body, where it is approximately twice as high during backward swimming as during forward swimming. During forward swimming, propeller efficiency was 0.727±0.028 (mean ± S.E.M., *N*=22) and during backward swimming it was, with a value of 0.748±0.055 (mean ± S.E.M., *N*=6), not significantly different (two-tailed *t*-test, *P*=0.56).

Stride length was 0.547±0.028 m (mean ± S.E.M., *N*=22) for forward swimming and significantly lower (one-tailed *t*-test, *P*=10-6) at 0.346±0.046 m (mean ± S.E.M., *N*=6) for backward swimming. Thus, despite similar slip (propeller efficiency) values, a shorter distance is travelled during one swimming cycle, which can be explained by the shorter body wavelength during backward swimming (Fig. 2; see also D'Août and Aerts, 1999).

Discussion

The present study shows that backward undulatory swimming in the eel involves fundamentally the same mechanism as forward undulatory swimming: a wave of curvature travels from the leading end towards the trailing end, thus delivering propulsive power. Our data on forward swimming can be compared with values in the literature for anguilliform swimming in eels (Gray, 1933; Grillner and Kashin, 1976; Gillis, 1996, 1998a) and for some other anguilliform swimmers (salamanders, Gillis, 1996, 1997; D'Août and Aerts, 1997; snakes, Jayne, 1985; Graham et al., 1987). Our data on forward swimming generally agree with previously published work, in particular with that from similarly sized American eels *Anguilla rostrata* (Gillis, 1996,1998a).

Backward swimming, however, shows important kinematic differences from forward swimming, and this discussion will therefore focus on a comparison of these swimming modes. First, for a given speed (except the lowest observed), cycle frequency is higher during backward than during forward swimming (Fig. 4). Second, the amplitude profile differs drastically between the two directions (Fig. 5), being much more uniform along the body during backward swimming than during forward swimming. During forward swimming, lateral amplitudes are very small in the head region and increase gradually towards the tail tip, in agreement with previous data from eels (Grillner and Kashin, 1976; Gillis, 1996) and other anguilliform swimmers such as *Siren intermedia* (Gillis, 1997), *Ambystoma mexicanum* (D'Août and Aerts, 1997) and the colubrid snake *Elaphe guttat* (Jayne, 1985). In general, amplitude profiles for forward anguilliform swimming reach maximum values more gradually than those for other swimming styles.

Backward swimming is likely to be less efficient than forward swimming in both mechanical and in metabolic terms. A shorter distance is travelled during a backward swimming cycle than during a forward swimming cycle. Moreover, during backward swimming, the movements are not most pronounced in the caudalmost part of the animal, but are larger along the whole body length (see Figs 2, 5) and are associated with much higher estimated muscle strains (see Fig. 8) than during forward swimming.

This probably forces the red fibre sarcomeres to operate at suboptimal myofilament overlap, reducing their function. White fibre sarcomeres may become most functional here if their gear ratio is sufficiently high. This is the case in the carp *Cyprinus Carpio*, in which white fibres can power the large-amplitude escape response because their gear ratio is four times that of the red muscles, which power steady swimming (Rome and Sosnicki, 1991). We do not know the gear ratio of eel white muscles, but can assume it to be much higher than that of the red muscles because of the helicoidal arrangement of the white muscle fibres in the myotomes (Alexander, 1969).

It should be noted that eels use backward swimming to manoeuvre in dark and complex environments, and as a 'burst' escape response, for brief periods only. Under these circumstances, swimming efficiency can be assumed not to be a critical issue. The selective pressure towards an efficient forward swimming mechanism must be much higher, since there is evidence that *Anguilla Anguilla* crosses the Atlantic Ocean from Europe to the Sargasso Sea without resting (e.g. Vandelannoote et al., 1998) and presumably without feeding.

Lateral head movements are very pronounced during backward swimming in eels. This is in contrast to the general trend towards minimising head yaw, which would favour perception (see Hoff et al., 1989). The large head movements observed may be disadvantageous, both during manoeuvring and during escape from predators and may explain why eels usually switch to forward swimming after a few backward swimming cycles.

A second consequence of the large amplitudes found along the body during backward swimming will be high muscle strain. Although our muscle strain data, because of the simplicity of the model used here must be considered approximate only, they indicate relative differences (see Results). The most striking result is that, in the rostral half of the animal, estimated muscle strain is much higher, by at least a factor of two, during backward swimming than during forward swimming (see Fig. 8). We assume that the muscle's resting length (i.e. when the fish is in a stretched straight position) corresponds with the plateau in the length/tension curve (i.e. optimum myofilament overlap).

This has been confirmed experimentally for carp *Cyprinus Carpio* (Rome and Sosnicki, 1991), scup *Stenotomus chrysops* (Rome et al., 1992) and saithe *Pollachius virens* (Altringham et al., 1993). Red muscle fibres would then move between ±25% of resting length (see Fig. 8) along both sides of the length/tension curve, a condition in which little power can be generated during a large fraction of the cycle time. We assume that the white fibres are most functional under these circumstances since they probably have a higher gear ratio and, accordingly, sarcomere length change would be much smaller than our estimation of ±25 % of mean length.

During forward swimming, body movements result from a backward-travelling wave of stimulation, with a speed higher than that of the kinematic wave (e.g. eel, Grillner and Kashin, 1976; Gillis, 1998b; lamprey, Williams et al., 1989). In the lamprey, a similar wave is found during backward swimming (Grillner, 1996), and it is a perfect reversal of the one observed during forward swimming. Grillner (1996) therefore suggested that the kinematics of backward swimming will be a perfect reversal of forward swimming kinematics. This was also suggested by Ekeberg's (1993) simulations of lamprey swimming. At least for eels (in which the backward swimming stimulation pattern is unknown), we have shown that major kinematic differences occur between forward and backward swimming.

The kinematics may differ even if the muscle stimulation pattern is exactly reversed, since this kinematics do not result from the stimulation pattern alone but also from the mechanical properties of the animal, from hydrodynamics and from feedback control (Carling et al., 1994; Bowtell and Williams, 1994). Some obvious differences between forward and backward swimming that may affect the relationship between stimulation pattern and kinematics are the reversed mass distribution (a heavy head and a light tail or *vice versa*) and the reversed lateral area distribution (a dorsoventrally flattened head and a laterally flattened tail or *vice versa*).

Further integrative research is needed to elucidate exactly how the neural stimulation pattern leads to the observed backward swimming kinematics although, for forward anguilliform swimming, considerable progress has been made in recent years (e.g. see Carling et al., 1994, 1998). Whereas many fish swim backwards by oscillations or undulations of individual fins, the present study shows that it is possible to swim backwards by functionally 'reversing' the existing forward undulatory swimming mechanism. Why do so few species show this backward undulatory swimming mechanism?

Those species that do all have an elongated body shape. The information available on such swimmers (see Introduction) reveals that they develop thrust along most of the body length in contrast to most other fish (e.g. carangiforms) in which the posterior part (or even the tail fin only) is used for thrust development, powered by muscles in the more anterior part of the body where there is little or no undulation (Wardle and Videler, 1995). Thus, carangiforms and most other fish have morphological and physiological specialisations for forward swimming that are not present in anguilliforms, in which power generation and thrust production occur along almost the entire body length (Wardle and Videler, 1995).

It is conceivable that the latter system can more easily be reversed; anguilliforms are more 'homogeneous' along the body length in terms of morphology and thrust production and thus the system could work mechanically in a similar way in both swimming directions.

In fact, the observed body movements during backward swimming were clearly less smooth than those observed during forward swimming (Fig. 9, compare A–C with D–F). Although digitising errors undoubtedly contribute to this variation, they cannot account for all the observed variation. The forward swimming sequence in Fig. 9A–C was digitised in exactly the same way as the backward sequence (Fig. 9D–F), but variation 0.05 m is clearly much smaller. This

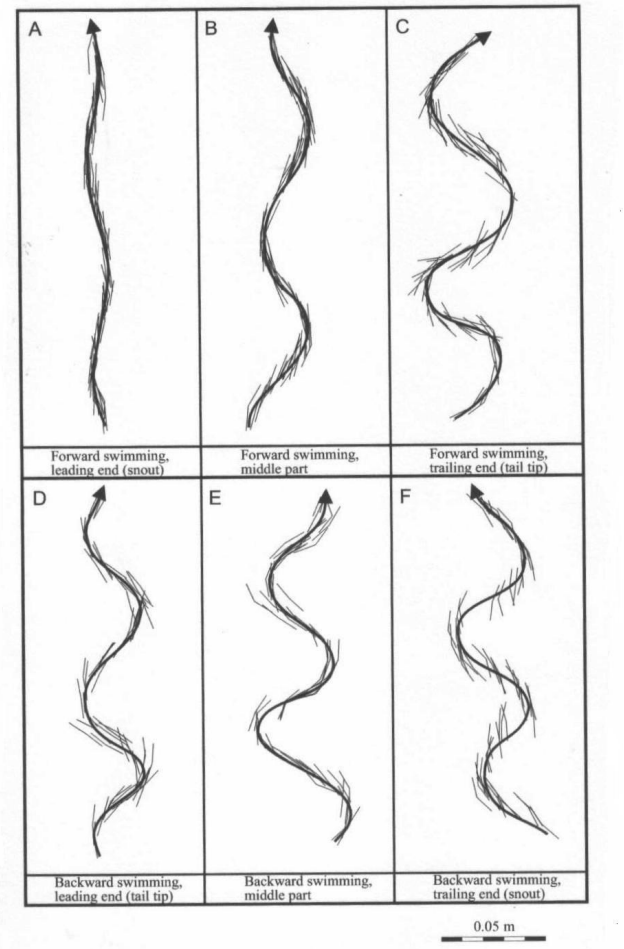


Fig 9: Plots of the position of segments of 10%L (two segments delimited by three body points), for approximately two swimming cycles> Segments are plotted forward at 0.02s intervals. (A-C) Forward swimming; (D-F) backward swimming. A and D are for the leading ends; B and E show the middle region of the eel; C and F are the trailing end. The mean path is highlighted with a bold curve and arrow. The angle of attack is the angle between a segment and its path. In both forward swimming, angles of attack increase towards the trailing end. L, total body length.

seems to indicate that the control of backward swimming movements is not as fine-tuned as that of forward swimming. During backward swimming, it is difficult to imagine how the few muscles present could power swimming and overcome the drag of the large lateral undulations that are observed at the leading end (tail). It is, however, possible that the angle of attack of the leading end is very small, despite its large lateral amplitude.

In this case, water reaction forces would be very small as well, and the tail would cleave the water rather than deliver propulsion, with the tail muscles operating as stiffness regulators (compare with Long, 1998, for forward swimming), actively reducing the angle of attack and avoiding collapse of the leading end (i.e. the tail).

Whether this hypothesis holds true can be visually assessed from Fig. 9, where the relative angle of attack is the angle between a segment and the mean path of this segment (bold lines on Fig.

9). Thus, if the angle of attack is zero, a segment would be parallel to or overlap with the mean path, resulting in a very narrow plot. In contrast, if the angle of attack is maximal (i.e. perpendicular to the path), the plot will have the thickness of the two plotted segments, i.e. 10%*L*. Fig. 9D shows qualitatively that the leading end during backward swimming does indeed show small angles of attack, despite the much larger amplitudes of undulation compared with forward swimming.

This supports our hypothesis. The middle part of the animal (Fig. 9E), shows a similar pattern, although it cannot be excluded that water reaction forces (and thrust production) are considerable due to the relative movement of water in this region resulting from the previous interaction between the body and the surrounding water. It is only towards the trailing end (Fig. 9F) that the angle of attack increases. As described above, lateral head movements are prominent during backward swimming, but Fig. 9F shows that the head moves differently from the other body locations: it remains approximately parallel to the overall (rectilinear) swimming direction of the animal, with large angles of attack with respect to the mean path.

Thus, it translates laterally, as a whole, but shows only minor rotation. Our kinematic data do not allow further investigation of the mechanism for this intriguing phenomenon, but one could reasonably expect that the heavy head would passively follow the undulations that were generated elsewhere in the body and thus have small angles of attack. Our observation suggests the presence of an active mechanism that counteracts rotation and minimises the ‘handicap’ of undergoing large lateral oscillations.

Acousticolateral and visual perception would obviously benefit from this pattern, which presumably would improve escape success. At the trailing end during backward swimming (i.e. the head and the rostralmost part of the body), strains would be much higher than in other circumstances. However, the observed movements could result to a significant degree from passive recoil, rather than from active bending by the muscles only. At least in the rostralmost three body segments, the observed undulations must be passive since these comprise the head region, where no swimming muscles are present.

During forward swimming, the picture is much more straightforward than during backward swimming. The leading end oscillates little, and angles of attack are small; the head is propelled almost rectilinearly through the water (Fig. 9A). The middle part of the animal (Fig. 9B) oscillates more (see also Fig. 6) and the angle of attack is greater. At the trailing end (Fig. 9C), lateral displacements and angles of attack are larger still. This qualitative analysis corresponds with the

view that propulsion is generated along most of the body axis in anguilliform swimmers (Wardle and Videler, 1994, 1995).

In conclusion, eels and other anguilliform swimmers have a highly functional backward swimming mechanism, which can be considered to represent a 'reversed forward' mechanism. This is probably enabled by the elongated body shape and more homogeneous muscle distribution along the body axis of eels compared with other fish. We thank Dr Frits De Vree for support during research in his laboratory. Two anonymous referees gave invaluable comments on an earlier version of the manuscript, as well as Dr John Long with whom we had interesting discussions on anguilliform swimming. Dr Raoul Van Damme is acknowledged for statistical help. This research was supported by a University of Antwerp research grant (BOF UA 1996, project number 2882) to P.A., who is a research director from the Fund for Scientific Research – Flanders (F.W.O.).

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Bowtell, G. and Williams, T.L,(1994) Aguilliform body dynamics: a continuum model for the interaction between muscle activation and body curvature. J. Math. Biol. 32,83-91.

Including a further 46 named scientists and researchers evidence and research papers to accumulate this thesis on A Kinematic comparison of forward and backward swimming in the eel Anguilla anguilla published by Kristian D'AOÛt and Peter Aerts on My 6th 1999.

Another Messed Up Seasson!!!

By
Martin Dorman

Well, here we are again at the prime eeling time of the year, June 2006, with the water warm and the Lobworms on life support to make it to the water alive. And so what am I doing? I have to go back to Sea for Four months and come back in November; another Season bites the dust for me.

I managed only two Eel Sessions, at my local Club water, with Eels up to 2 lb 12 oz at least I caught but I know they run to at least 5 lbs in there. The main problem is that the gravel banks are gently sloping and the River Wensum runs behind; so unless an Eel is particularly keen to stay then there is nothing stopping them returning to the Sargasso. The larger ones I caught (3 over 2 lbs) have undergone the 'Change Of Life' i.e. a colour change from sandy Brown / Yellow to the mature dark Brown-Black with a Silvery White belly. They also exhibit a lovely large mouth but,

‘contrary-Marys’ that they are, you cannot buy a bite on dead-baits (so far) and all have come on Worms.

I now have my eye on another club lake complex (only £ 50 or so a year) where three lakes back onto another stretch of the Wensum. One of these lakes is not fished as it is very deep, steeply banked and no one ever catches anything there (ideal Eel water though it sounds, I have heard other Eelers in the past have been unsuccessful, but we shall see). For this season I have had to be content with my club water and the odd bonus Tench (to 8:06) and Bream (to 10:05).

So I thought I would mention a few items of Tackle that, although I am sure you have heard of, have actually impressed me and served me quite well.

Reels: Mitchell MD 60 – although they take a bit more getting used to than your average bait-runner (due to the need to push the spool to engage the free-spool mechanism) I have got used to them and have found that they have an excellent advantage for Eeling. When set to least resistance Free-spool setting, I find these much smoother and freer than many other free-spool Reels, when you want minimal resistance than this has to be an advantage. Perhaps I have never brought a top of the range reel which can better it, but I know that Shimano’s costing several times more are not as free running at minimum. I have had these Reels for 6 or 7 years now and as long as you ensure you have disengaged the Frees-pool mechanism before striking a run then they are fine. The other advantage is that they are cheap and have now come down in price as well to only £19.99.

Rods: “Leeda” Obsession 2.75 lb TC – enough backbone to pull up an Eel quickly but I think they still retain a bit of flexibility to absorb those heart-stopping lunges at the net. Another advantage is that I can haggle with the Tackle Shop owner down to only £ 24 a rod – as they were not being produced anymore. As well as appealing to the skin-flint in me it also means that when I eventually break them, as I do most of my tackle, that it’s not the end of the world.

Bite alarms: Fox Microns – the original type for £ 19.99 with leads and Remote Sounder Box. These do the business and have a simple push button on/off switch. Apparently one of the best, if not the best, selling bite alarm ever. I have had no problems whatsoever with these and the batteries are only just staring to run out after Five years. I have now picked up some second hand ‘as new’ Red Plus Delkims but will need to re-mortgage to buy the antennae and Sounder Box required for remote operation. Still they seem loud enough so far without a remote alarm.
I use Fox lightweight hangers with these as, oddly enough, they are very light.

Line: I brought, several seasons ago, some Brown ‘Eel’ line from the Askari catalogue, of about 18 lb BS. Naughty boy that I am I still use it and on inspection still looks good and has never let me down. Mental note …….. Must change this for next Season!

Hooks: ESP Raptors seem nice and strong and even in tiny sizes (smaller than size 6) have never bent on me yet.

Bedchair: I enjoy my home comforts but have to sometimes pay a bit more for the extra strong / long ones to suit my 6’ 7” and 21 stone “slight” frame. So about 7 or so years ago I purchased a JRC Super Cocoon 6 leg bedchair. This has lasted me well and even survived a couple of bankside ‘incidents’ which would have left most other bedchairs bent beyond all recognition. I think I paid about £ 240 but this included a chair as well and although I do not think they do this model anymore, JRC do seem to build the stronger chairs from what I have seen.

Chair: Also a JRC – the Cocoon model (now called a 'Terry Hearn' I believe) which retails for about £80. Again it's strong (I went through several other chairs before spending a few quid more and purchasing this one). I have had it about 3 or 4 years now and still in perfect working order. I have also found that the JRC Factory is down on the Suffolk / Norfolk border and they do repairs for the occasional person who turns up on their doorstep. It was reassuring to see the magazine 'Improve Your Coarse Fishing' give it top rating as well – at the time it was the lightest fully sprung chair there was.

Bivey: I think I now have the perfect combination of a session / overnight Shelter (Fox Stalker Shelter £59.99) and the longer session true bivey (Fishrite XS – cost me £90 when they were about £200 as it was an unwanted prize, but I see they are down to about £150 now). The Stalker Shelter comes with a detachable Groundsheet (for muddy backs and keeping the damp out) and easily takes my extra long bedchair. It's light enough to carry around instead of an umbrella but keeps the wind out from the sides as well. The Fibreglass poles are extra strong/thick and the material much thicker than cheaper 'Fisherman's Tents'. The Fishrite Bivey also has a detachable Groundsheet and a Winter Cover as well (all included in the price). The structure is Aluminium Poles (much better than fibreglass with my track-record) on elastic and can be put up quick enough.

Luggage : I have a few bits on the go here as I am always chopping and changing as well as having separate gear for Eels, Pike and Carp/Tench etc. I have mainly used a JRC
(them again!) Combi-Rucksack with a detachable top bag (which I keep gear for a longer session in). Original cost was about £50. I also have a 'Hardwear' Carryall Bag which I received from Fishtec after a particularly large order. This has four small pockets, at the rear of the inner space, for storing bite alarms. I also have a Pro-Logic Session Sling which has 5 detachable individual Rod Slings; so you can simply unclip any excess rods without having to perform a holdall autopsy. This retails for about £50. Recently I have had to purchase an X Tuff (Fishtec) Sling to take my 13' Carp Rods and was very impressed by the amount of padding and variety of useful pockets on this Holdall.

Unfortunately I have now filled it with so much gear that even I can barely lift it – but it has not ripped or broken like previous Rucksacks have when subjected to the horrendous amounts of Tackle I can carry. The sling itself sells for about £40 but I got it for £20 after Fishtec cocked up my order. I now have 12' sleeves (£15 / £17) to fit on it as well as this also can carry Five clipped on Rods and a couple more on the Velcro. This also has a base which cannot absorb water from damp grass/mud etc. As part of this order I received an X Tuff Carryall Bag for free (normally £25) and this was impressive as well. It has a removable/ wipable inner liner which itself has two pockets in. It also has netting outer pockets which whilst useful for drying items can unfortunately catch on sharp twigs and rip as it is continued underneath the pockets as well. I now have my eye on those new Korda Luggage items with the waterproof bases with 'secret' compartment in and free tackle boxes …….

Rod-Pod: Fox Horizon Rod Pod, 4 Buzzer Bars – although I tend to use a goalpost set up for Eeling I have recently taken possession of this new pod (rather expensive at about £105) but, as the advert says, the possibilities are endless. You can changes the front and rear buzz-bar supports to further vary the relative heights (as well as the usual telescopic legs), you can adjust the position of one pair of legs relative to the other, you can lengthen the pod to take even my 13' Carp rods (only one I have seen able to do this), attach a Captive Back Lead Bar and Peg down separate Mud Feet. The buzz-bar bosses also have a unique lockable device for when those

tightened-down bleepers are not quite straight. When using a goalpost set-up I have found the Fox three rod buzz-bars very good – the plastic twin pack for about £15.

Cold Weather Suit: Sundridge Minus 10 Two Piece Suit and Sleepskin Layer - a requirement for night fishing early and late season. I managed to pick this up for £80 from Fishtec as they had run out of the other clothing I wanted and I was putting in a big order anyway (over £ 10 is big isn't it ?!). This is so good that I wonder how I ever got on without one before. The under Sleepskin layer is good as a 'bivey suit' if the weather improves but the ¾ Jacket and Bib 'n' Brace has every feature you could dream of, such as Secret pockets, hand warmer pockets, a wired non-collapsible Hood, zipped/ poppers/ Velcro fastenings and even comes in a green colour. It's even available up to my 'Giant' (Fat B****rd) size.

Pro-Logic Connectors: These allow you to change Indicators and Rod Rests without unscrewing everything. I have seen them as cheap as £6.99 for a set of three and are made of lightweight aluminium and allow fast connection of separately carried buzz-bars and Bite Alarms.

Glow Sticks: As I often get a few for free off the Ship, I always put one or two up at night when fishing. This gives a dull glow to see by without having to use bright lights. They last 8+ hours (although decreasing in intensity after an hour or so) and are still ok for a couple of years after expiry (the ones I use!).

Stove: - how could I finish without mentioning the new range of cheap Camping Stoves now available? I brought one of the first ones four years ago for about £ 25 but ones as cheap as £6.99 (Leisure Tech from Q.D.s') do the job just as well and are superior to the old Camping Gas ones. My Leisure Tech has a four pack of cylinder refills for under £5 and boils a kettle in about a minute on a newish cylinder.

Depthfinder: I recently brought, due to being on offer, one of those "Smartcast" Wrist mounted depthfinders. It all seems jolly hockey-sticks but its early days and I am a bit lazy in using it!

Although a rather eclectic mix of gear, this lot is serving me well and suits my needs. I am not too much of a 'Tackle Tart' i.e. I don't pose in Realtree Camo Gear, but I like good design, strength and value for money. Saying that I have a 'Camo' bait bucket, which I am sure has increased my catch rate …….. maybe!

All the best, enjoy the rest of the season and watch for my record catches in 2007 …… maybe.

Martin J. Dorman.

Editor: Well reading the last section of the article and low and be hold I have bought some "Real-tree camo" gear and even posing in it in the mag!!!!! This made me laugh and giggle!! As far as improving catch rates the only thing I can say on that, since wearing the gear it hasn't improved my catch rate with eels, but fishing the canal in the winter time for perch and pike especially this season I have caught twice as many pike than ever before.

It is the only time of year that the canal clears up around here, (there is basically no tree cover on both sides) not to a fish bowl standard, but you can clearly see fish and watch the pike striking under the surface, when I have laid on the path inches from the waters edge in the "Real-tree camo" gear, they have been chasing/ taking live fish right under my nose literally, and don't seem

to notice me, I usually just stalk them now with bits in my pockets, two rods set up on chub floats (7ssg) and a bucket of live baits, taking 68 pike in total between November and March this year biggest going 16lb 04oz and a new P.B, this was caught in the snow (twenty years to get a decent fish in the snow) taken from a water with no pike history, it is the first time it has been captured, so there maybe something in this concealment clothing after all and not just fashion or a fad after all!!!!!

I will have to now get a matching bucket as well and see if it improves it any further, cause at the moment I need all the help and luck I can get!!!!! Thank you for your Article Martin and for making me laugh! Tight lines!!!!

Status and Management of the European Eel

By
Clive Dennison

'Can we get a grip? Status and management of the European Eel'

Thursday, 27th April 2006

Huxley Lecture Theatre, Zoological Society of London,
Outer Circle, Regent's Park, London NW1 4RY

Provisional Programme

1.00		Registration
1.30	Association of Rivers Trusts AGM	*Formal business and a short review of activities*
2.15		Buffet Lunch
	Session 1 – Setting the scene	
.15	Tom Fort - author '*The Book of Eels*'	*"An introduction to the fascinating eel and its importance"*
.30	Roger Castle, Silver Eel Fishermen	*"Eels from an eel fisherman's perspective"*
.50	Brian Knights, University of Westminster	*"The status and future of the eel"*
.10	Renata Kowalik, Zoological Society of London	*"The state of the European eel in the Thames"*
.30	Eric Feunteun, Scientific Group, Indicang Project	*"The Indicang Project - A European Approach"*
.50		Questions followed by Tea and Coffee
	Session 2 – Future Management	
.40	Dr Mike Pawson, CEFAS	*"Developments in the management of eel stocks across Europe: EC Eel Recovery Plan and its implications for the UK."*
.00	Beth Williams, King's College London	*"Development and Implementation of Biological Reference Points for the Management of the European Eel."*
.20	Miran Aprahamiam, Environment Agency	*"Severn eel management plan, compliance with targets and development of management actions"*
.40	Robert Rosell, DARD, N. Ireland	*"Towards sustainable management of the Lough Neagh Fishery, the largest remaining wild eel fishery in Europe"*
.00		Questions
.30		End of Symposium

Hi Tony

Find attached possible article for mag, probably too long winded but anyway, if you decide to use that's ok by me, if not fine.

Fished that 2 acre pit on Saturday night , the one I'm struggling to get an eel from , pestered by Carp on everything bait wise. Fished 2 rods on Rudd section deadbaits and 2 on Dyson livebait rig with Rudd livebaits (the place is solid with them!!) got the expected - 3 common Carp of about 7lb on the deabait sections!! And no eels, nothing on the livebaits, pulling a few more hairs out.

Must fly going on Holiday in 24 hours

Cheers Clive

Eel Symposium – 'Can we get a grip? – Status and management of the European eel'. London 27th April 2006 - A Summary by Clive Dennison

On 27th April 2006 I attended a symposium on Eel Management organised by the Association of Rivers Trusts (ART) at the Huxley Lecture Theatre, Zoological Society of London. The Title of the meeting being: - `Can we get a grip? – Status and Management of the European eel'.

The aim of this meeting was to draw together a range of speakers and other interested parties to debate the future of Eel fisheries management especially in light of the recent developments and moves at EU commission levels to introduce a European Eel Recovery plan including new legislation and management plans.

The ART were holding the meeting because one of there affiliated Trusts – The West Country Rivers Trust, are co-ordinating the work of the `INDICANG' project in UK which has started an Eel monitoring and survey scheme in the South West of England on a number of different river catchments. This project also covers a number of Eel populations in several other European countries, more details of this later in the article

EU commission proposals for the legislation to draw up a European Eel recovery plan weighed heavy in the background of all the papers / presentations and is obviously the main driver behind this symposium and all the inter party discussions between the personnel at the meeting during the informal discussion sessions held during the breaks and lunch periods .

Summary of Individual speakers presentations

First Speaker was **Tom Fort** , who , he openly admitted had little real research knowledge of the eel but a respect and admiration for the eel as a creature and for those attending on the day with responsibility for providing data to secure the eels long term future by input to future management issues.

The next speaker was **Roger Castle** a commercial Eel fisherman. Roger primarily fishes the lower river sections of the Hampshire Avon, Dorset Stour, and brackish waters of Poole harbour. Historically he had caught up to one ton per week until the early 1980's, at market prices of around 2.00 pound per pound weight.

The largest eels he has caught were around 6lb in weight, the he had seen largest alive being 7lb caught a from Poole trawler. Roger is now semi retired catching 1 to 2 ton per year. Roger exports his Eels live via Mike Brain primarily to Holland.

I had a one to one talk with Roger during the meal break, he admits to major decline in catches during the 1980 / 90's with Poole Harbour catches (representing the catches from the Dorset and Hampshire river catchments) only representing a fraction of the catches of those in previous years, with a major collapse of catches starting over 15 years ago.

I put the following question to Roger during an open forum question time: 'Given the discrepancies between the reported catches of the licensed commercial trade and that of the export figures from custom and excise how does the commercial industry propose to correct this situation so that accurate and meaningful catch return figures can be supplied to the EA so as to be used as an accurate tool in the management plans and any recovery plans'. This was to highlight the need for control and licensing of dealerships and more tractability of where Eels and Elvers had been caught.

His response was that whilst he admitted that there were problems with the reporting of catches primarily because of tax implications etc, he was as concerned as me about illegal nets-men moving into his patch, potentially nicking his gear or affecting his Eel catches. He did not think that regulation of dealerships would be effective but drive unscrupulous netters to do it unlicensed anyway.

Brian Knights – University of Westminster

Brian is known to number of the NAC committee (Steve R, Tony J, Myself and Nick Rose), He approached the eel groups for info on our stance and case just prior to the MAFF reviews in 2000. We were rightly sceptical of his motifs, and it turn out to be correct as he subsequently gave supporting evidence (written and Oral) in support of the commercial eel industry. At today's meeting he was sat shoulder to shoulder with Roger Castle the commercial netter and Peter Woods of UK Glass Eels the Elver Exported. Unfortunately he still seems highly regarded by the EA being one of only a handful of guys who have actually done any ground work on studying UK eel populations.

Brian reported a decline in all three main world wide `Species 'of Anguilla – American – A Rostrata, Japanese – A Japonica, and European Anguilla Anguilla . He claims 75 % decline in European recruitment not 99% as in press and that the North Atlantic Oscillations Index in ocean currents (NAOI) is responsible for historical fluctuations and recent decline in Elver recruitment numbers reaching UK and European waters.

Brian gave a UK picture as one of relative stability, stating that 'The Eel is not a threatened species'. He highlighted environment problems caused by lack of effort by EA to address migration issues and maintenance of access, and was somewhat critical of the EA's lack of duty to maintain passes and wetland habitat management. Not sure whether this was more an attempt to divert attention away from the commercial fishing interests.

He repeated raised the suggestion that because of reduced Elver numbers approaching UK and European waters that density dependent factors would have a lessening effect during Elver migration up river catchments, and there may be less drive by elvers up into the middle reaches of

river systems, even if there were suitable habitat made available in the future. His analogy being "Why carried on striving up the river system when there is suitable environment here" and no sign of other Elvers or Eels colonising.

Another one of his statements was "Eels are not in the middle and upper reaches of river systems because there's loads down in the brackish basin systems and nobody has done any work on these stocks" No doubt hoping to get yet another 3 or 4 year contract to study the lower brackish eel populations!!.

NB: Miran Ampramian of the EA admitted at the forum that there had been insufficient survey data of these brackish estuarine stocks but that EA priority has been and remains to monitor stocks in the middle and upper rivers catchments and potential access to still-water systems.

Renata Kobalic – Zoological Society London

Monitoring Eel stocks in the Thames from 5 different locations, 2005 first full season. One other location due to start during the 2006 season.

Areas previously studied by B Knights 1993, B Knights assisted 2006 , no significant changes. She reported that no previous monitoring of River Thames Elver recruitment numbers have been done since 1988.

Aims to assess stocks and barriers to migration and monitor populations, history of stocks in the middle and upper Thames catchment very limited.

Acasia Wier River Darenth Redbridge / Passsingford River Roding x2.
Merton Abbey Mill River Wandle. Molesley lock River Thames .
Zenith Wier on River Mole - from 2006 if installation completed.

Focus on monitoring and input to future research , input to management plans from growth and distribution survey identifying key obstructions to passage

Prof Eric Feunteun (INDICANG Co-ordinator Europe)

This talk was meant to be an outline of the work and projects being developed under the INDICANG project. In reality it was a summary of the process at European levels both in research and EU legislation discussions that had brought about the proposals for the `EU Commissions Eel Recovery Plan'. Eric advocated the precautionary approach advocated by ICES and EIFAC outlining the need for increased monitoring programmes across Europe to provide data for management plans to document populations of eels and monitor future effects of the recovery plan. Eric outlined the management definitions that would need to me monitored and assessed as part of each of the catchments monitoring projects.

The Indicang projects covers monitoring projects in several European countries :

1. The UK, Rivers Fowey, Tamar and Camel and Slapton Leys Stillwater.
2. France, 5 River catchments.
3. Spain, 3 River catchments.
4. Portugal - River Minho

Aims of the projects are to assess stocks, identify sources of human mortality and evaluate environmental factors effecting the distribution, ages and sexes etc of the populations. Assessment of estuarine and river system Elver recruitment via Elver traps, sedentary Eel stocks and breeding capacity are also being studied. All schemes are in the very early stages of monitoring, most having started in 2004 / 2005

CEFAS – Dr Mike Pawson

Mike's papers were withdrawn due to overrunning of time, his paper was to have detailed the EU commission proposals and their implementation within the UK, The General EU proposals were covered by Eric Feunteun, but it would have been advantageous to get prospective of DEFRA CEFAS on the UK implications of implementation and proposals, and how they planned to move them through into legislation.

Tony Mark / Beth Williams of Kings College London. "Development and implementation of biological reference points for the management of the European Eels".
The work of Tony Marks and his teams covers 9 test catchments using 14 rivers.

Rivers : Darent, Clore, Blackewater, Hull, Blyth, Ellen , Piddle, Lower Severn , Afon Wnion , Gara and Start plus the Slapton Leys Stillwater. They are trying to identify the key points of data information required to input them into eel management plans, and how best to be able to assess these consistently and accurately across differing catchments and varied populations of eels. Piddle and Severn revisited after early surveys in late 70's /80's other 2000 onwards.

He reported that it was very difficult to accurately assess the numbers of eels escaping from a river system or predict future stock numbers etc because in most cases there were only limited amounts of population survey results providing comparisons over long term data figures. This aspect has major implications on EU regulations.

Miran Amphramian (Environment Agency – Eel management Specialist)

Limited long term data available for River Seven, yes survey work done in the lower reaches early 1980's but comparison data is 20000 onwards, nothing in between. Eel specific surveys only carried out in lower reaches nothing above Worcester.

Survey data for upstream of Worcester collected using general coarse fishery river surveys but these are not eel specific, catch methods i.e. electro netting and nets were not ideal for catching eels – i.e. fykes preferred method for specific eel catches, and only give a snapshot view of eels populating an area, and if not repeatedly revisisted then they are of limited value in this context of monitoring long term specific eel population dynamics. Only say "Yes we had or did not have eels present there in 1990…..1996 … etc"

All longer term data is based on survey work downstream of Worcester, 1983 surveys followed up 2000-5 give us scope to challenge escapement figures.

NB in private discussion with Miran he agreed that the EA were having to keep a close eye on developments at European levels to determine how they were to progress with the drawing up of

management plans. Miran admitted that the biggest problem with any EU commission legislation was how legal and consultation process could be implemented.

EA still not drawn up complete definitive list of priority obstructions requiring Elver passes but regions were working to get these in place so as to look for funding for Elver pass installations, hopefully from EU.

Alan Mullinger (EA NE Region Fisheries Retired) was also present, he gave me an update on the NE regions Elver pass installation project which has installed 3 passes last year and looks to install other when funds available. Reiterated the relative inexpensive construction of passes used and the particular success of the units already installed in opening up previously restricted access to uninhabited areas or catchments.

Robert Rosell (DARD) Lough Neagh NI Commercial Eel Fisheries

Totally a commercial enterprise driven by a commercial syndicate of shareholders.
My suggestion would be that this fishery gives extremely minimal contribution to the spawner numbers but his suggestion and presentation puts a case that because of the regulations ie restrictions in seasons for yellow and silver eels, max width of silver eel fisheries fixed assets across the rivers – 10% of river unobstructed and River level fluctuations (low levels no escape no catches / medium levels good catches limited escape / high levels and flows over weir tops poor catches and high escapement favouring the eels) he suggests that the fishery is already meeting its 40%SPR silver eel escapement target!!

He suggests that any major restriction on the silver eel fisheries would place a major financial burden on the overall economics of the whole fishery as these provide a disproportionate income compared to yellow catches.

This fishery must have a negative effect on Eel stocks since it removes several tonnes of naturally recruiting Elvers which are transferred into Lough Neagh , plus some purchased Elvers (from UK Glass Eels) are also required purely to sustain a commercial venture. Production of eels to market is around 500 te / annum but they are putting a case forward that enough silver eels escape the system due to restriction in fishing methods and seasons etc.

A Data CD containing PDF and Power-point files of the presenter's papers and presentations was provide to delegates, and provides us with a lot of interesting information on current projects and monitoring schemes within the UK.

Cheers Clive Dennison 03/07/2006

By
The Editor

Last Season I didn't do that well not for to lack of trying, the fact was I was limited on fishing time and when I did get out the fishing was tough as always to say the least, but even when blanking thoughts turned to the questions why? Was it the presentation that had outstayed its welcome or was it something else going at the wrong time due to the moon phase or had the eel in that particular section already fed, or was it down to wrong location at that moment in time???

Even this season out of 8 trips I have had one take on a live perch using a running Dyson rig to hit thin air, when getting the bait back the perch's dorsal fin section looked as if a eel had decide to fillet the flesh from its back bone with a pen knife that must have been concealed on it's personage and this run only came when there was a moon in the sky (First Quarter) and haven't yet come across another eel in the canal ironically this is a fair result as I only expect 1 run in twenty trips as the norm anyway.

The problem I have is that I know that it has big eels and I know that it has received a lot of hammer from myself over the years and even though there are a large amount of still waters that are untapped in this area and I know that they are going to be difficult, but they have the potential to produce very big eels, the canal is hard to break away from because I know they are still in there and few new eels may be moving up and down the canal all the time and the captured eels have moved or have become precarious in there feeding habits.

This why I put a lot of time and effort in my choice of presentation so when a run eventually happens then it is already hooked when it takes the bait. I have been escaping the canals from time to time to have a go at some local still waters to fish for eels what a difference it is firstly I feel very uncomfortable fishing a still water, the canal has become a comfort zone I think over the years, but on the other side the new duck out of water affair is also exciting in some respects.

Even so my thoughts have changed to the approaches of rigs and tactics that I have been playing with and pre-baiting with bait left over from a successful winter perch/pike escapade, even pre-baiting a water for up to six weeks with no result this hasn't deterred me from fishing still waters just like the canals they are in some respects difficult venues that I have in this area and a majority untapped by proper (obsessive) eel anglers.

So this season I have looked at different methods to hopefully encourage more takes and hopefully put some eels on the banking this season, one main factor I have been looking at is the important bit the hook and hook-link presentation of the bait used to:

1: Hook the eel on a one to one run to hooking ratio.

2: To prevent a deep hooked eel or create a more effective method on what has already been developed and 100% successful, for a variety of baits mainly fish sections and eventually live baits.

3: The safety aspect of the presentation if the worst happened and a break off occurs.

4: Hook choices and materials, and different hooking mechanics, rig/bait presentation, near the end of last season I was looking at bent hooks using shrink rap, this season I have changed my hook sizes and hook pattern and putting an actual bend in the shank with a set of pliers, using Korda long shank X's size 10 and ESP long shanks sizes 11, as they do intermediates which I prefer from the ESP range compared to the Korda which is still a superb and reliable hook.

Another interesting hook is the series 5 long shank from Fox International which has already a natural curve ideal for pop-ups or Dyson/SFR presentation. I have even been looking at the “chod rig” for its hooking capabilities used for carping with either worms or dead bait sections; I have taken eels successfully over the years with fully fixed rigs before, perfectly lip hooked and no need to strike at the run, just leaning into the eel as the jobs already been done by the rig and hooking arrangement (Article in process).

We need as a club to push the boundaries on how we fish to prevent or eliminate these factors, may be someone out there has different ideas to what have to these problems or has other theories about it, but at times it feels that there is only a small band of members doing anything as far as experimentation and development in tackling all aspects of eel fishing, as nothing appears on rigs and tactics or thoughts on eel behaviour from anyone else in club, quite a few years ago this was a different story and quite a few members where contributing some great articles covering all kinds of manner of thoughts and theories on eel fishing covering rigs, effects of moon phases, flavourings and attractants the new wonder eel bait est. but to me this has come almost to a stand still in the last few years, why is that?????? Can anyone tell me????

Is there no members fishing for eels anymore or are you going through bad seasons as I have done, but still had something to write about even the bad times there is always something to learn from a blank session and to be honest that’s all I have had this season up to know, but they haven’t been a waste?? Are you using the same methods week in week out? Has your water changed since the first time you eel fished it? Has your run rate depleted or increased because you changed something? Do you have any thoughts on the reasons why? Is no-one thinking anymore just letting some one else do the donkey work and not indulge any results or write about their finding and experiments? Have we become so secretive and elusive ourselves like our intended quarry that we are not willing to share with the rest of the group??

Has the membership become stale or comfortable or not that bothered about furthering their own fishing or helping another member by relating their own experience and findings putting there thoughts into a readable format, or on the bigger picture developing eel fishing into a new era? Or am I expecting too much from the existing members? Have I had it too good in the past being in the club for over a decade??? I’m finding hard to believe the latter but it does make me feel disillusioned and I’m not talking about fishing for eels.

The whole reason for me in the first place to join the NAC was to learn about eel fishing and in time develop my own thoughts and experiences and methods and pass on what I have gained to the membership through the mag I thought that’s what a single species specialist group did??? I’m sure eel fishing isn’t a close book yet, far from it. This magazine should be a “think tank” pooling as much research and information on all aspect of interest about eels not just fishing experiments! Tony B.T finds some interesting papers from all over the world on eel research and what is happening with the eel conservation side of the ECS.

What have you found out about your quarry what bait, rigs anything else of interest no matter how big or small you may think it is. It might have an impact on another members fishing in another part of the country, any problems you have tackled, or you have come across and can’t work out why if you don’t write about it then the problem will still be there and making excuses on why the session was a blank and putting it down to other things, where has all this gone????

The big question is “Are you (The membership) going to do something about or let it continue till there is no point in producing a club magazine at all and go backwards to a few page bulletins twice a year instead when the mag first appeared on the scene in its infancy a decade ago when it was rescued by Steve Richardson??????? As the saying goes you get more satisfaction and pleasure in contributing than just gleaning.

This is one main reason I have decided to step down, if not and I continue in this role or any committee role I don’t think I would be in the N.A.C in the future. At the end of July we are almost half way through the season and at this present time of writing this section (20th of June) I have out of 20 pages of text (Articles) more than 11 pages has been done by the Bulletin team themselves in this edition of “AnguillA” for a better word this is just worrying!!! And a very frustrating affair for me every time I start to put the magazine together for publication because it is always a struggle to get enough pieces to produce a magazine of a good standard and 40 pages (which is binding I think in the constitution), for the members to enjoy reading and to have a wide range of very interesting subject matter about eels and eel fishing.

The next question is what can we do as club to get it back? Or can we? We need the involvement of you the membership to change it; the committee can’t do it all with little input from the membership. Being off the committee or on it we are all have the same problems either in our fishing or restriction on the time we are allowed on the banking either keeping the peace at home or through work commitments.

The magazine is a communication tool for the masses with in the club and at this moment in time it is not being used like it used to be or how it can be used to its full potential. Once the communication breaks down then everything else will eventually fall apart and disappear from existence, this is why clubs fold because it is left to the same individuals swapping hats with each other every year at the A.G.M, or in some case one person to wear all the hats, time and time again to keep the club running smoothly the best way they can to eventually the inevitable.

This has been a continual problem with the magazine and basically it shouldn’t be if it is a case of you don’t know or unsure what to write about that is why I have left open questions to hopefully encourage you to start putting pen to paper or fingers to keys and write about your season or a particular session that stood out from the rest. It doesn’t have to mean a capture it could be an observation or a night of continual missed or aborted takes and striking into thin air!! We are not all professional writers and yes it is an awkward task to write an article if you are not used to doing it on a regular basis, that’s where some of the members can give you advice, if it is needed use the bulletin team for help and guidance, there is no set format of articles that are going to be preferred over others!!!

Every one of you has a page to write about anything remotely eely from season to season one page each is over 40 pages a magazine, two pages each a year is a 40 page magazine twice a year and some left over. I’ve sat down and griped for more than two pages with little effort and at the end. Realistically the winter edition is when every one who goes out fishing for the eels in the summer has something to write about and I should have enough material to put a mag together and some left over for the spring edition for the forth coming year especially rigs and methods or experiments as this may be more relevant for the new coming eels season, you have had a full season to do it and an article there are no excuses to not even do one page a year!!!!!