

Based on the time it takes to travel the distance between mile posts I average about 3mph with my narrowboat. As a previous correspondent stated, 4mph on narrow canals is aspirational (more likely impossible without washing away the banks). If some boaters want to do 2mph fine, but don't stop others doing 3mph as it only causes frustration. Remember, in windy conditions, light fibreglass cruisers have difficulty steering a straight line. Let those following go past. If you are doing 2mph you are not in any hurry so if a boat overtakes you and gets to the lock first, so what.

I have been boating for many a year since I got a job at 16 (now 53) at a marina on the Thames but only in the last 5yrs have I crossed over to canals and narrowboats from cruisers, for me boating on the canals is meant to be a relaxing and slow thing so my view is when you are on a canal (narrow or wide) you should travel at the appropriate speed as to not cause any wash or damage to the bank which I think is around 3-3.5mph in general.

Rivers generally tend to not have man made banks and are also more susceptible to being worn away by wash however that never bothers the majority of gin boat I see at full pelt! But again speed should be to not damage the bank etc.

If a boat is ahead of me going at tick over with no need to be so what, slow down and keep at a safe distance and wait till an appropriate straight, so far when this has been the case I have always been waved past when it possible the same as if I am going slow and someone behind is going faster than I want to be then I would wave them past.

If passing a moored boat I always slow early and creep past on tick over and then slowly build up the speed once I am past some people seem to think that just reducing speed slightly once they are along side you and then full speed as soon as they are passed is acceptable and to be honest I tend to find these are the older generation who think they have more rights as they have done this for longer than me!

Anyway ! slow and relaxing with nice people to chat to is what I am after and the odd idiot, well I will just have to accept it for now.

Something not mentioned so far on this topic, unless I missed it, is the effect of width and depth of the waterway when assessing the speed at which to pass moored boats.

On a narrow section, and especially a shallow narrow section of canal, moving past moored boats at anything more than a very slow speed will result in unpleasant heaving of the moored boats, pulling on mooring lines and bearing of the boats against the banks unless well fendered. This occurs at speeds well below that required to produce a breaking wash. On most rivers, with their more forgiving hydrodynamics, this does not occur unless there is a big bow wave or breaking wash.

The proliferation of occupied online moored boats on many long sections of our canal network pose a difficult dilemma for the considerate cruising boater, necessitating the balancing of causing minimal nuisance versus actually achieving more than 7 miles in an average cruising day!

I have just returned from a trip on the Shroppie and was frustrated on many occasions by boats much travelling slower than myself and not looking behind to check for other boats and allow me to indicate that I wish to overtake. Can you, or other boaters, advise me on the most appropriate way to indicate to the boat in front that I wish to overtake.

We have always tried to travel as slowly as possible as we believe that boating on canals should be all about nature watching, peacefulness and relaxing. Not to mention safety! However, although this was common when we first started boating, hardly anybody travels at a sedate pace now and indeed seem to be travelling faster and faster.

We do tend to travel faster now, if only to please other boaters. However, we have lost count of the number of very sticky and/or dangerous situations we have managed to avoid because we have been travelling at a sensible speed.

Canals are usually very narrow spaces, especially with mega wide beams becoming more popular. If anything, boats should try to slow down.

Depending on your tickover speed, given historic engine tickover could range between 50rpm to 500rpm e.g. steam engine or slow semi diesel or even some big twins like Kelvin k2 vs lister jp2 and ha2 with other engine like nationals or rn in between. It can also vary from boat to boat with the same engine in, surely if your passing even at speed as long as the passed boat isn't being caused to move or bounce around or ropes pulled then you've slowed down adequately that you can still pass carefully but not so slow you can't actually still be making progress.

I bring this up with more and more sections having 1/2 mile lengths where boats are moored if your tick over speed is say 1/2 - 1 mph could take you an hour to do next to no distance.

Also on bigger open section some river section or even canals you could be doing 3mph and your small bow movements not even reach a moored boat enough to move them!

I have sailed yachts for several years and started narrowboating almost 4 years ago and love the ease and freedom we all enjoy on the Cut.

Regarding cruising, on my particular boat, which is a 59 foot semi trad (Reeves hull), I find 1500revs is comfortable cruising for the engine, boat and crew, this equates to about 3mph when checked on gps. Once above this speed at about 3.4mph a wake tends to start to develop depending on the depth of water so I tend to stay at 3mph. On approaching moored craft I reduce to around 1000revs which is about 2mph or tickover which is marginally less at 1.6 to 1.8mph. (Please note for my boat/hull 2mph appears to have no discernible effect on moored boats this may vary boat to boat).

To actually be at reduced speed when passing moored craft I find the throttle needs to be reduced at around 60m or 3 boat lengths away to have an adequate effect. So many boaters appear to reduce only a few metres away from moored boats thus the speed does not reduce until they are past or until a 3rd moored craft is reached; try it by running a gps speedo on your smart phone if you have one available.

With regard to mooring, if moored properly a boat travelling at 3mph whilst not courteous should have little effect. I moor quite often at a soft bank and use 2 pins fore and aft, the additional pin each end being a spring line. Basically a triangle each end. Craft passing without slowing having little to no effect yet the pins can be pulled out vertically using finger and thumb!

When moored on armco or a timber I use chains pulled reasonably tight with a spring line off the bow so 3 lines, the result is a stable moored boat. Please note I detest the dreaded nappy pins that clank and jerk and can jump free if tied loose, marginally quicker to use but inferior to chains. Be aware that boats moored on an outside bend are more effected by passing boats due to the displaced water being thrust more directly so bear that in mind as a moorer and passing boat.

Using "tick over" as a cruising speed is hardly practical. The speed is subjective as obviously it varies boat to boat depending on set up.

I have on occasion had to close the throttle completely at intervals to avoid catching up a boat in front with exceptionally slow tick over moving past moored boats unnecessarily slowly.

To actually cruise on tick over becomes obstructive to other users and is not cruising it is crawling and the boat can become less controllable in wind etc. I have followed some boats travelling this way their course being a slow zig zag which becomes infuriating. Yes you can drop back, but whilst you should not be in a hurry as it is not what narrowboating is about, reasonable progress is needed albeit only at walking pace. It also seems to be a rarity to be waved on by those adopting this dead slow pace and a toot on the horn from a following boat would undoubtedly attract abuse, yet when sailing use of the horn is acceptable letting the boat in front know you are about to or wish to pass. It could of course be a novice in front hence the slow progress however all the more reason they should be waving on the following boats.

It all boils down to being considerate to fellow boaters, give a thought to the boat in front, the boat behind and the boats you are about to pass.

One last thing which is an observation. Positioning on the Cut; the idea is to generally travel in the centre of the Cut and move to your right in good time when another boat approaches which we all understand. However, I notice all can be guilty of travelling well to the left of centre without realizing. This could partly be due to our being used to driving on the left, but I believe it is due to the optical effect sitting to the left at the rear of the boat the apparent width of water either side at a cursory look may appear equal but it is not. Take a moment and compare each side by physically looking over each side of boat. It may surprise you to see how far to left you actually are. This means the approaching boat could be seeing this same effect thus both parties are thinking the oncoming boat is taking too much room and not moving over enough from centre. Check this out next time you are on the cut.

We are Continuous Cruisers and canal traders. We have been doing this for 6 years now, and we cover many hundreds of lock miles every year.

The answer to this question - as with almost *all* questions pertaining to narrowboats and canals is "It Depends" [tm]

Our 57ft Colecraft with 18" prop and Lister LPW4 engine quite simply will not go as slow as some boats we come up behind - especially passing moorings. This means we have to drop into neutral - and this, in turn, means we have No Steerage!

Our 'tickover' speed is not fast - measured using a gps app it equates to Under 2 mph, but this does not stop *some* people shouting and moaning at us to slow down. A lot depends on the canal profile - wide and deep such as much of the Leeds & Liverpool, Bridgewater etc, produces much less disturbance at 3mph than under 2mph does on a narrow and shallow canal.

On one memorable occasion we had cruised past over a mile of moored craft of all shapes and sizes near Burscough with many a cheery wave from the occupants - until we passed a *Huge* Dutch barge when the skipper came hurtling out onto his bridge and hurled abuse at us for going too fast!

I related this tale on a Facebook group and said chap joined in, stating that "It should take you 20 seconds to pass my boat and you did it in 15 seconds!" Utterly Ridiculous!

We could provide many examples of people on moorings who are *guaranteed* to shout no matter how slowly or quickly you go past them.

Ultimately it is not about speed but displacement of water. No matter what speed you move at you are pushing your boat's weight in water, so in our case around 18 tonnes of water is moving around as we travel

It can also be argued that a poorly tied up boat will move much more than a well moored boat - the worst offenders being those who have a bow-string tight centre line off their roof - the highest point above the boat centre of gravity, and this is *bound* to make any boat rock at the slightest disturbance.

As a fulltime liveaboard boater of 5 years, which is comparatively not very long, it is my observation that:

1) less & lessening numbers of boaters are passing us when moored at a reasonable pace, I'd say less than 30%. I used to speak to people & politely ask them to slow down but now due to being on the receiving end of verbal abuse on several occasions, I now hold my tongue. Instead I praise those that pass reasonably. Now what is reasonable? Well in my book tick over isn't a speed it's when the engine is running on its lowest possible revs, which can mean you have no control if the boat because the rudder requires some thrust from the prop in order to be able to function. A reasonable speed would be 2mph & no significant bow wake & no considerable disturbance from the prop.

I've heard it said that hire boaters are the worst but in their defence it depends on the company they've hired from & the tuition they've received from the hire company. I find two categories to be the worst offenders: a) some but not all shared ownership boats & obviously it's some but not all shareholders who are guilty & b) some of what we liveaboards refer to as the 'shiny boat brigade' they generally use their boats for 1 or 2 weeks per year & occasional weekends, they tend to keep their boat in marinas for most of the year & many of them seem to be in a rush. Not only will they speed by you when moored but they will try to rush you through locks if they're behind you & will even turn locks against visible, oncoming boats, even when they've been made aware of a boat that should take priority as the lock is set in their favour.

2) speeding when not passing moorings usually the same culprits as above. Contrary to what I read in one item in the boater update, some boats can & do exceed 4mph in 'open water'. On many an occasion I've been walking briskly along the towpath & have been overtaken by a boat traveling

between 5 & 6mph, creating huge breaking wakes even in places with soft banks both sides, which obviously is the main cause of bank erosion & a major cause of silt build up.

Now the way I see it the Trust earmarks limited funds to dredging & speeding will eventually lead to some sections of canal becoming difficult to navigate & eventually will require expensive dredging operations to be undertaken.

Personally in my experience is that speeding on the waterways is on the increase, I've never come across anyone going too slow & causing a tailback, if I had then I would've been happy to pootle along behind & enjoy the surroundings. If you want to go fast on water get down to Abersoch with your speedboat.

Hopefully more of the Tick over Boaters who sit on their boats shouting Tick Over will now read this months article which explained that engine Revs are not proportional to boat speed and stop making idiots of them selves.

I do not profess to be the perfect boater and at times have left it a little late slowing down before passing a moored boat I do not pass on tick but at a speed where I can maintain head way without creating a wash and that can depend on many factors. Boating is not a perfect science, Enjoy it while you can.

For interest some years ago we tested cruising speeds using a hand held GPS on our 42ft narrowboat which draws 2ft 6in. This was on the Coventry Canal not far from Streethay Wharf between steel piled banks so we wouldn't cause any damage.

At tickover 2.7mph. At normal cruising speed with no reflected wash 3.3mph. At maximum revs and black smoke 3.5mph.

Since that time, I've used a lot less revs when cruising. It's much quieter and more peaceful and makes little difference to the cruising time. In any case, on many canals with shallow edges, it's impossible to cruise much faster than tickover without causing excessive waves on the bank.

We thought we'd drop you a line about the subject of 'tickover' and cruising speed. Firstly, we are just retired early and are not a couple of old foggies! As we have both been boating for a few years, my wife, Jenny, about 10 years with her own boat (before we met) and me about 8 years with my own boat, we both have a good idea of how things are now and how they have changed since we started boating. We've been continually cruising the system since 2016 and now moored up on an offside online mooring (about 20 boats are moored where we are). So, I think we are well experienced to comment on narrowboat speeds, so to be succinct, here it is.

1) Generally, boats move faster than they did even a few years back. Everybody seems in a hurry these days. It's not much different than on the roads now.

2) It doesn't matter to argue over what is tickover speed. So many boaters now go past moored boats too fast. That has become apparent since we took this online mooring. There are about 20 boats moored here but few boaters even bother to slow at all past our line of boats. We wouldn't dream of

passing a line of moored boats so fast. You hardly get eye contact from the skipper as they know they are going too fast. It's just impatience!

3) Like on the roads, you never seem to be going fast enough for the boat behind. I'm talking about cruising along at a fairly decent speed, not (that dreaded term) tickover. We have had boats tailgate us and in the end, we just pull in to let them pass. We're not talking about hire boaters here. Private (normally very clean and 'posh') boats with older men at the helm. We were almost chased down the north Oxford recently going to Braunston. I assure you that the faster we went, he wanted to go faster!

4) We've just witnessed in the last few minutes a boat overtaking another outside our boat. Three boats abreast in the canal (not too wide here). The boat overtaking flew past rocking all the other boats. This boat was a new looking share boat with the usual aloof older man at the helm.

To sum up, the canals are not as pleasant experience as they used to be, even less than 10 years ago. The whole idea of boating on canals is to unwind and relax, not travel around such an such a ring at the greatest speed possible just to say you have done it. And, just to say again, I'm not taking about hire boaters here. They seem to like the relaxing and slow speed of boating. It's the posh private boats that are the main problem. I say, sell the boat and get a motorhome and do all of us slower boaters a favour.

Every boat is different, I have a fairly standard modern boat with a modern 4 cylinder diesel and 600 RPM tick over which gives me about 1.5 MPH so far I have only had 1 complaint in over 2000 miles of cruising, apparently the guy shouted at everybody.

I have been followed by old working boats who at tickover are considerably faster than me probably 2 MPH and can't go slower. I have also followed an older boat with a lister engine who I measured over the ground at 0.56 MPH as I followed him for an hour and a half mainly passing boats. Most of the time I was in neutral and so had no control and sometimes I just held onto a moored boat whilst he got some way ahead. fortunately it was a quiet day with little wind. This illustrates why the old speed sign of 2 MPH was wise tickover is just so varied. The day I followed the old lister if I could have found a safe place to moor I would have, as it was so difficult trying not to drift into anything with no steering due to no propwash.

Often it is just not possible to go more than tickover or 2 mph (approximately) because of a lack of water and/or lack of dredging e.g. the long top stretch between Napton and Claydon flights on the Oxford.

Passing moored boats is my bete noir - why do so many boaters steam past at full speed? Why do they think they are exempt from the rules and recommendations? And it's not just hirers (hire companies should emphasise this more) but boat owners are just as bad.

Some interesting comments there – I've never travelled at 'tickover' except when passing moored craft and then I cut to tickover about one and a half boat lengths from such. I've never travelled at more than 3mph except on rivers. In my experience too many boaters are already travelling too fast to start with and, therefore, are still travelling too fast past moored craft even if they've cut the engine. Many hire boats have had a lecture before cruising so they're not too much of a problem. I've had



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cabin cruisers pass my long time mooring at 8mph – not so much of a problem with such craft as they rarely rock my boat but they do nothing for the banks en route.

The single most helpful thing CRT could do is come up with a phrase that describes what is required better than the grossly misleading term "tickover". As your first writer correctly points out, it is an utterly meaningless phrase in the context it is used and using it does far more harm than good. In engineering terms, 'tickover' is the speed you set your engine to idle at when in neutral and not under load. It is not a suitable engine speed for travelling past boats or anywhere else. I have often wondered how it ever came to be used in the first place. Is it, perhaps, something that is more applicable to traditional engines?

I would like to suggest that there are two concepts that impact upon this question, responsibility and courtesy:

Every time we tie up our boat we have a **responsibility** to tie it up securely so that it does not suffer harm when other vessels pass. This is the primary responsibility in the situation under discussion which we cannot shuffle off onto the shoulders of those who happen to pass our chosen mooring. It is the responsibility of every boater every time we moor our boat. That means using bow and stern lines running forwards and backwards respectively at 45 degrees to keep our boat into the shore and, in some conditions, fore and aft springs to help keep it in place. If we moor using only a couple of slack breast ropes (ropes running at 90 degrees) then we have failed in our responsibility to tie up securely.

Does that mean I am suggesting we can motor past moored boats at any speed we like? Not at all. Passing boaters have a **responsibility** to keep to the speed limits and other regulations specified in the T&Cs of their Canal and River Licence. They should also, as a matter of **courtesy**, pass at a speed that does not unduly disturb a properly-moored boat, **provided it is safe for them to do so** (see below). (That speed will be different for every boat dependent upon a whole range of factors, one of the most significant being draught.) If passing at such a speed disturbs an incorrectly-moored boat, then that disturbance has been caused by the failure of the moorer to discharge their responsibility to moor securely, not through any discourtesy of the passing boater.

The phrase **provided it is safe for them to do so** is very important as there can often be reasons why it is not possible to pass as slowly as one might wish, most notably wind and current. Attempting to pass moored boats too slowly in strong cross winds can lead to only one result: being blown sideways into one of them. Generally speaking, the stronger the wind the faster the minimum speed for steerage.

So how about coming up with a better phrase than "tickover"? What we need is something that recognises the need for responsibility and courtesy from **every** boat user. "Please pass at a responsible and courteous speed"? It's a bit of a mouthful so I'm still thinking. I'll let you know if I come up with anything with a bit more of a ring to it but, in the meantime, can we at least stop using the term "tickover"?

If you're in a hurry get a bus or a train and stay off the canal!

Regarding 'tick over', remember speed can be added if you think you are going too slow but cannot be taken off if moored boaters think you are going too fast. So, take the revs down two boat lengths from the moored boat, momentum will take you to the moored boat to pass at a considerate speed.

The point made about tickover not being a speed is quite correct and my 43hp engine and 18" prop also sometimes get me into trouble!

Some points not mentioned in your item include;

- 1) Tickover is the minimum number of revolutions you can achieve with the throttle adjustment last provided by your engineer (if not yourself) and may vary from boat to boat even if same engine and prop! Sometimes the engine may struggle and continual running at tickover may not be desirable.
 - 2) the fact that running at tickover can cause battery issues if your inverter is on and you are running a washing machine while travelling say. This should be born in mind if running at tickover along long stretches of bankside moorings as on the S.U. and expecting your batteries to recharge whilst the washing machine is running!
 - 3) Our fishermen friends also expect us to pass at tickover, to leave their fishing area as undisturbed as possible, so that the silt on the bottom (often too near the top!) is not mixed with the water. Frustrating as that may be when large fishing matches are taking place.
 - 4) Travelling "at the maximum speed that creates no damaging wash" is not usually desirable for those of us out to enjoy the scenery and not on a fixed timetable. It creates drag on the tiller which converts to aching shoulders after a long days cruising!
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Just read with interest your points regarding travelling at tick over. I was surprised that people travel at tick over other than passing moored boats. I've always been of the opinion that you should make progress but always consider wash and damage to canal banks.

I am moored at the south end of Foulridge tunnel on the Leeds Liverpool canal. Our problem is when (normally hire boats) come through the tunnel and race to turn their boats around and get back for the timed return tunnel. I have often asked them to slow down and tried to explain the problem of speed passed moored boats plus damage to the canal bank. This is sometimes met with people slowing down but also met with some expletive and they speed up more.

This is not a whinge by the way. I think the answer is common sense and being a responsible boater in differing situations.

I am a constant cruiser liveaboard with over 10 years on the cut. First of all an analogy. Imagine, first time experience, being told to drive an electric car at 16 mph max, around a course with obstacles etc. You must maintain the correct speed as told by speed signs. And oh, there is no speedo in car.

That is position of some hire boaters, surely a change to Boat Safety for all new boats to have a tacho fitted is way overdue. Hire boat operators should be made to mark the tachos, tape or bright marker pens, with two marks. This would be an all things being equal in terms of water flow and wind. One mark for passing moored boats, the other for cruising speed.

Finally perhaps Boat Safety should include a short test run to check that "tick over" traction is possible, there are some engine gearbox set ups so badly adjusted that "tick over" gives a speed of 3mph.

Having read the Boaters' Update for many years, I want to finally break cover and commend the article on cruising speed and tick over this month. The canals are places enjoyed by a wide variety of craft with infinite set-ups and tick-over speeds.

As a long time user of the system with a cabin cruiser, my tick-over inevitably causes me to travel faster than some narrow boats - there's not a lot I can do about it. To be met with intolerance, bloody-mindedness and a discourteous approach by some, does nothing to ensure the harmony of our leisure time.

So congrats to the author of this piece. They get my full support and vote for challenging a taboo and introducing a sense of inclusive and selfless boating to the canals.

Interesting views. It seems to me that most boat owners should be capable of working out, in broad terms via observation and simple maths, the speed of their own boat relative to its engine revs, they therefore have absolutely no excuse for exceeding 4mph, period.

The issue of tick over is as pointed out more complicated with some, particularly large traditional boats, finding that even when on tick over they are going at 3 to 4mph. Common courtesy dictates that when passing moored boats you should slow as much as possible and do all you can to avoid any violent rocking of moored boats. Sadly this value is becoming a rarity in the modern world.

Popular opinion is that hire boaters are the worst offenders when passing moored boats. In my experience it is fair to say that hire boats rarely pass at tick over however most make some attempt to slow. No, the worst offenders when it comes to speeding past moored boats are selfish boat owners who should know better and should have more respect for other canal users.

Quite frankly if you are in such a hurry to get everywhere why the hell did you buy a boat?

So

- Never more than 4mph
- Never create a breaking wash
- Never cause moored boats to rock around violently.

Finally on the subject of courtesy. I have noticed that poor behaviour has now extended towards winding boats. Recently on two occasions I have seen boats pass others whilst they were in the middle of winding. Selfish, dangerous, stupid behaviour. We need more courtesy towards others on the cut.

I know we are very much "the forgotten few" but those of us who only cruise rivers, and then often just to get to the sea, have a different view.



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The 4 mph only applies to the canal system and some connecting canals (Newark dyke etc). Narrow boaters seem to think it applies to all waterways. We get very long views from them when we seek to overtake.

Our limitation on non tidal rivers is normally 13kph down stream and 9 or 10kph upstream. On tidal waters the speed limit varies but is normally set by the port authority. On tidal waters we are quite often driven by tidal times and this may affect the speed at which we need to travel. Despite this I would never approach or overtake a narrow boat at a speed which was likely to cause any problems. We have a duty to look after each other's interests, and I include anglers.

I like others can get annoyed at boats speeding past especially on the K & A where you mostly use pins to moor. And do the hire companies make a point about speed to the people that are hiring their boats and tell them to slow down? I can forgive novice hire boaters for most things but not speeding.

I can also moan/complain about boaters going along enjoying their day at a snail's pace and oblivious of the queue behind them. I have sounded the horn on more than one occasion to let them know that I would like to get by. We all would like to enjoy our day and we can it's just a bit of consideration for others, it goes a long way. What can be very annoying is boats moored on or as close to lock moorings as they can. Trying to get a sixty foot boat into the lock mooring with a boat moored on the last bollard is quite difficult. They must be people that don't move because otherwise they would realise how much they are in the way or they just don't care.

The secret is slowing down early enough before you reach the moored boats. I have just returned back to base after a four-week holiday and although I don't let it bother me, I would estimate that over 70 percent of boaters ignore moored boats and the majority of the offenders are private owners

It should be borne in mind that the canals were built to travel on and not to moor. These days it becomes increasingly frustrating, passing seemingly endless lines of moored craft, when trying to keep to a reasonable schedule.

If moored craft were tied up better they could withstand boats passing at a reasonable speed. I rarely, if ever, pass at tickover but adjust my speed to the width & depth of the canal which seems to be accepted by moored crews. Of course the final frustration is slowing down for a moored boat to find that it is unlicensed.

Tick-over is not a set speed I agree but any boat can go slowly past moored boats if it is skippered by a competent Skipper. My boat is a 23 ton, 50foot, Broad Beam, with a 65hp output through an 18" prop with a potential speed of 8.5 mph. However, when passing mores boats I can move dead slow by reducing the speed to tick-over and if required even engage reverse gear. Should I need more power to enable rudder steering a "short burst on the throttle will very quickly provide enough rudder control but this only works if you are traveling dead slow.

I have had many boats pass me when Moored obviously not on tick over, having been a boater for more than 13 years, and having navigated the Tidal Trent and Ouse frequently as well as many miles on rivers and canals I can tell the difference.

Those Skippers give no consideration to other boaters that may be attempting to moor up and not yet tied off, or tying or untying their boats, who could find themselves unable to hold a rope under such conditions.

Also many Skippers have no concept as to the effect of displacement that can affect boats 1/4 of a mile ahead and a large boat has to move a large amount of water even at slow speed and a small boat even a dingy powered by an outboard motor traveling a speed can cause a great displacement.

Can we all show a little consideration for other boaters and go Dead Slow past moored boats. What would it cost? Just a few minutes. Once past increase your speed to whatever is reasonable for the prevailing conditions. I live in hope.

The only time I drop to tickover past moored boats is when they are on pins on 'soft banks' (your definition). I do slow down even past some of those endless miles of on line mooring where you thought the occupants might have got a grasp of securing their boats! Fortunately, policy dictates that no more of these will be granted, well done!

All the comments you share seem to relate just to "moored boats". ALL moored boats. The concept that we should pass moored boats at a much reduced speed (however you measure it) was established two centuries ago by working boatmen passing their known night stop and loading areas. This is a civilised and good mannered arrangement.

The idea developed by modern pleasure cruisers that if someone pulls into the side for a cup of tea and ties his boat to a stump with a bit of that blue taffeta rubbish then suddenly everyone else must slow down is absolute nonsense. He is even entitled to stick up a notice reading "Slow Down Past (sic) Moored Boats", or "This is not the M25".

(Incidentally, vehicles parked on the M25 would be promptly towed away.)

Our canals are major highways of the past and it is gratifying to those of us who spend our spare time restoring them to see them so used. They are not playgrounds, nor should they become linear housing estates for permanent moorers. I stop often along the way during my cruising, moor the boat adequately, and enjoy a break or a picnic. That is part of the enjoyment of boating. I am quite happy for traffic to pass me at a normal cruising speed (which as you say is less than 4 mph anyway) which of course makes the boat rock a little. So what! Should I not expect the same from others?

Minimum passing speed is required passing official mooring sites, as defined by Trust notices, where people are working or living. I believe you are quite wrong to encourage this quite unnecessary procedure for casual moorers, and I would hope one day to see a clear statement from Trust to that effect. A clear instruction to moor boats with decent lengths of mooring line would also be helpful.

It is perhaps a result of the often bad tempered and ill mannered "canal rage" of those who shout at anybody and everybody who they consider are "going too fast" - sometimes with justification, but often

based on nothing more than noise levels, and often incorrectly - that an increasing number of boats now cruise everywhere at "tick over"? (As HAS been discussed before in your newsletter!)

This "cruising at tick over" IS a new and growing problem for those of us who cruise regularly. Unfortunately, those same boaters often don't understand the reaction of two hulls to each other in an overtake situation - and after being frightened by that reaction once, refuse to allow others to pass later?

I'm afraid this IS an extension of those who don't handle passing moored boats as the joint responsibility of both the moving, AND the moored - but who just SHOUT!

I have just read with great pleasure the comments on cruising speed. It is a source of some relief that it's not just me. I am rarely in a hurry but at times have had to keep knocking my boat into neutral to stay behind some boats. I have no problem with people travelling at whatever speed they want but check behind and move over. It's just polite.

Much has been said about passing moored boats - the most important factor is to maintain steerage way which can be determined by prevailing/direction of wind. Failure to do so may cause the boat to bear down on moored craft. Width of channel available also has a bearing. The speed at which steerage can be maintained will vary from boat to boat but should not be as high as to generate a "wash" which is the critical factor.

However, moored boats should ensure that their moorings are in good condition and tightened - many use a strap and ratchet. Another helpful tip is to use a "back spring", one will do, which stops the moored vessel surging. I personally find the latter tip very use previously using it extensively when I was at sea. If the moored boat is allowed scope to surge it will have the effect of stretching the moorings - this frequently happens where boats are left unattended for several weeks.

I agree that tick over speed is fine even good to the environment when other boats are not following. A keen eye must be kept though to ensure other boats are not approaching from the rear and then as Doris Day would say "Move over Darling".

Far too many people forget that when passing moored boats they need to slow down several boat lengths before they reached the moored boats, slowing down alongside is far too late.

I have a wide beam, these displace much more water so even greater care needs to be exercised. Tick over is often too fast so the secret is to go into neutral and pulse the throttle to be able to maintain steerage.

Always look behind after you have passed, if the boats are bouncing around then you are going too fast, and it's your responsibility. If in a hurry? Tie up and walk

One point worth making is that when passing moored boats consideration should be given as to whether or not the boats are moored on spikes on 'soft banks' i.e. unprotected banks. In particular unattended boats so moored are most vulnerable.

If so tickover should mean exactly that i.e. minimum speed. Other than that other factors are down to judgement e.g. depth of water and width of waterway etc.

I think a little over the tick over speed depending on the size of your boat is fine. If you have your mooring ropes taut at a 45 degree angle that normally stops the inertia of a passing boat from knocking you about.

Why travel by canal if you're in a hurry? What is more important than experiencing the slow pace of waterways life? It's all in the mind.

Tickover is too slow on most boats even when passing moored craft. Just take a look at the way a lot of boats are tied. Slack lines roof top centre lines no spring lines. And those boat owners are the first to tell you to slow down! With their boats moving up to 2 Metres when passed. The volume of linear moorings on canals and rivers is ridiculous, a normal cruising speed can very rarely be obtained because of them and journey times are massively increased! Water volumes have decreased due to the lack of dredging and dredge depth reduction, causing higher wash at lower speeds. So who is to blame for many of the problems connected to speed?!!! Gone are the days when the Cheshire ring could be done in 5 to 6 days!

The suggestion that all boats should have a "speedometer" is excellent and could save fuel as well as tempers! I use a Garmin eTrex (see right) to measure speed as well as cruising distance. It shows that depth of water is the most important factor. On my boat at 1000 rpm, the speed over the ground has varied from 1.3 mph on the shallow Daw End Canal of the BCN to 4mph on parts of the T&M in Stoke where the water is deep because of subsidence - and perhaps 4.5mph on river navigations. Increasing the throttle can reduce speed rather than increase it. I also found that you lose less speed by coasting through narrow bridge holes as on the Caldon. The eTrex can also give grid references to help the emergency services find the boat in an emergency (they don't usually recognise bridge numbers!).



I thought it was 2mph past moored boats - although the throttle needs to be cut at least a boat length in advance of the moored boat. And as on the road, we can choose to go whatever speed suits the journey, provided it is within the limit. Want to pass a boat - sound the horn!

The amount of movement your boat causes in the water is a combination of the following factors:

The draught - a deep draughted boat may move more water;
the speed you're travelling at and the width and depth of the water you're on.

You need to observe the effect you are having as you pass along. Is there a wave racing along with you slapping unfortunate waterfowl out of its nests?
Are moored boats bobbing like toy ducks and slapping against the sides?
Is the cheery greeting you give moored boaters being met with a frosty glare?

YES? SLOW DOWN!

To be thoughtful and respectful, reduce your speed to tickover while you're still at least one boat's length away from the first moored boat. If by the time you actually pass alongside, you are gliding gently past and being smiled at by the owner you can assume that their goldfish is still safely on the sideboard and you've "nailed" being a considerate boater. Now don't muck it up by immediately applying full revs! Wait until you are a minimum of half a boat length past the last moored boat then gently increase your speed to a pace that isn't causing any damage.

That's what works for me and so far, I've never had a fist waved at me nor watched a line of boats react badly to my passing by.

Most boaters understand that water depth matters. What you need are conclusions most people agree on that the Trust could act on.

So what could you extract from the comments? I think it boils down to three areas:

A. Maximum speed.

1. That 4mph only applies on canals and some non-tidal rivers.
2. Most boaters have no idea what speed over the ground they are doing. You cannot relate it to engine rpm, as water depth and channel width affect it.
3. Someone suggested using a GPS, but I have tried a few and none work well at less than 5mph. They are mostly designed for cars.
4. All who mentioned it agree that a speed that creates a breaking wash on either bank is too fast.

So most would agree with the Trust amending the maximum limit to "4mph and no breaking wash". I'm sure someone in the Trust could come up with a nice little sign for "no breaking wash". The best you have at the moment is this in the boaters-handbook "Don't let your boat create a breaking wave or a lowering of the water along the bank just ahead of the boat." Hardly a "rule".

B. Normal Cruising speed

1. Everyone has a different opinion. Nearly everyone can justify that opinion.
2. You can't compromise the "slow is the spirit of the waterways" with people who need to be back by a certain date who have been delayed by something unplanned, like a broken paddle, or engine failure.
3. Given that all the Trust can do legally is apply a maximum (see above), everything else depends on courtesy.

4. Most agree that it is not discourteous to want to pass a boat moving more slowly, but that it IS discourteous to impede a faster boat once you have had fair warning of its desire to pass.

C&RT already explain in your boating guides about behaving with courtesy, you need to add specifically that this includes allowing a faster boat to pass you. (but see below)

C. Passing moored boats

1. Less than half think this should be at minimum safe speed.

2. Those that disagree cite examples of mile after mile of linear moorings.

3. Others talk about depth and breadth of the channel.

4. Although only 15% mention that knowing how to moor a boat is important, most, I suspect, would agree.

5. A number mentioned that less and less boaters are slowing down enough passed moored boats.

I think the Trust can conclude from this that the increasing number of linear moorings are causing more and more boaters to question the "tickover passed moored boats" rule. One correspondent pointed out that the Trust policy is to no longer allow long moorings, but as more farmers realise they are sitting on a goldmine, this is only going to get worse.

Personally, I slow down for all moored boats except linear moorings of more than 10 craft. I think the Trust should issue warnings to all boats on long linear moorings that they should pay attention to good mooring practice as they can no longer depend on all boats slowing down.

So, Your Questions:

1. I suggest "minimum safe speed", but think everyone will continue to use "tickover" anyway. It is a waste of time debating what to call it when more and more people, including me, are ignoring it.

2. Golden rules:

a) Never cause a breaking wave along either bank.

b) Check regularly for boats behind you, if they are catching up wait for a safe space then move over to starboard and signal them to pass.

c) If you want to pass a boat in front of you, wait for a clear stretch, then move up to within a boats length. If they don't notice you, politely toot your horn.

d) If you are about to pass a boat being held on lines by the crew, always pass at absolute slow, and as wide as possible. This is a dangerous situation.

e) If you pass a moored boat, give it a wide berth if possible or pass very slowly, the closer the slower. So, if within 2 metres, Minimum safe speed.

f) Never empty or fill a lock without a boat in it, unless you have checked for a boat coming in the other direction.

3. No point. The best you have on a boat is a tacho not a speedo. If you mark a tacho the actual speed will vary depending on water depth and channel width.

4. Same as cars. If you are happy with the speed, stay back. If not, move up to within a boats length and if they haven't noticed within a couple of minutes toot the horn.

Finally, and thanks if you have read this far, I think you "golden rules" idea could become a nice little Trust handout, like a "highway code" for canals. One small A5 pamphlet people will read. Maybe 10 little rules with explanations. Of course getting agreement on the 10 rules.....best of luck....

Re overtaking: there are already accepted sound signals for overtaking:

- 2 long blasts 1 short I intend to overtake on your starboard side
- 2 long blasts 2 short. I intend to overtake on your port side
- Long short long short I agree to be overtaken

Re speedo: no need for fitting speedometer on own boats. Great idea to make compulsory to have speedo on hire boats. Many free suitable apps available eg Boatspeedo

Also need to consider enforcement and speed signs which read our speed with smiley / miserable face in sensitive areas. Could your staff be provided with speed guns?

Re mooring techniques to prevent excess movement: could more be circulated regarding this - would be very educational!

Messages for new boaters:

- What is the speed limit?
- How is it enforced?
- Why is there a speed limit (preservation of river / canal banks and wildlife)
- What is a breaking wash?
- What is the fine for speeding?
- How to moor your boat to prevent excess movement

A couple of things on the speeding past moored boats point

- The key point is that speed is not very relevant, it's about understanding and then taking account of the effect your boat has on the moored boat. This will be affected by the design of each boat, the shape and size of the cross section of the canal, and how well the moored boat is tied up and fendered.
- There are some important points for the moorer in all this.
- I was surprised that the summary did not note the difference between surface wash and the hydraulic effect as boats pass. A fast canoe can cause lots of the former (which is fine) and none of the latter, a deep draughted narrow boat vice versa (which is a problem)



- I don't buy the point that crosswinds mean you always need to speed up. You do need to steer more into the wind. And there may come a point where the channel is too narrow and you have to speed up.

-
- 1) My observation of inexperienced or inconsiderate boaters is no appreciation that it is the bow wake which causes most of the problems for moored craft. You correctly suggest slowing in advance and this should take the length of your boat into account. Far too many boaters "knock off a bit" as they pass to appear thoughtful but their actions are thoughtless. This is particularly true for boats stopped temporarily and held by one person on a centre rope which can almost be wrenched from your hand. Estimation of excessive wake is objective if the wash is breaking against the bank but possibly too subjective to set an acceptable speed for passing moored craft. Since it is the prime culprit and principal variable, however, to answer your question I propose the observation of an almost collapsed wake as it hits the moored craft. This takes account of many factors, boat design, canal and river width etc. whilst allowing boater discretion.
 - 2) Golden rules:
 - a. Watch your wake to protect the bank and safety/comfort of moored boats.
 - b. Slow down before hazards where you cannot see the canal beyond, there may be a boat coming.
 - c. Protect your engine by warming the oil at a slower speed for 10 minutes or so.
 - 3) Speedometers wouldn't hurt on hire boats but it will be a sad day if it becomes universal. Speed isn't everything, better boatmanship is the answer.
 - 4) There is a sequence of horn blasts which covers this, many other manoeuvres and gets you noticed at the same time. The codes could be laminated and placed next to the speedo. Is this acceptable? I'm not so sure but it may be preferable a compulsory RYA course for all boaters.

-
1. The minimum speed necessary to maintain safe steerage.
 2. a. correct procedure for overtaking and being overtaken.
 - b. how to moor correctly with consideration to other users, particularly at busy visitor mooring. i.e. not in the middle of a space for 2 or more boats.
 - c. look for oncoming boats before turning round a lock.
 3. Speedometers do not take account of depth of water and canal profile.
 4. Get close to the boat in front and send someone up to the bow to ask to overtake, do not use your horn.

-
1. Concise term/paragraph.

“To pass moored boats safely you need to slow down at least 50 metres before the moored boats. The speed which you pass should not cause unnecessary movement of the moored boats. Do not pass close to moored boats. If it is windy you may need to travel slightly faster to maintain safe control of your boat”.

2. Golden rules for boaters.

1. Be courteous and respectful to all users of the canal as you would expect to be treated.
2. Make sure your boat is safe, serviceable and securely stowed before cruising.
3. If you don't know or aren't sure of any aspect of boating and cruising then ask. Boaters generally are very helpful people.

3. Marking tachometer/speedometer.

Definitely do this. It would help everyone. My throttle has a setting for passing moored boats. A mark for normal cruising and a mark for passing moored boats would benefit all. Probably the answer to all speed problems.

4. Letting people know you want to pass.

There is already a horn signal for letting people know you are there. This is one continuous blast of 10 seconds. There are other horn signals. One that is not used is 5 short blasts of the horn. This could be used for “I want to overtake”.

1. Concise term: "Slow right down to tickover before passing moored boats to avoid excessive movement in these craft "

2. Golden Rules.

- Never allow your wash to break into a wave.
- Slow right down to tickover before passing moored boats to avoid excessive movement in these craft.
- Keep a watch behind and indicate to any approaching boat behind you to overtake when and where it is safe.

3. Speedometers. No thanks, this sounds well outside the canal ethos.

4. Overtaking: One long blast on the horn is a general alert signal and should be an accepted way of alerting a craft ahead that you wish to overtake.

I accept your challenge to write a condensed "rules of boating" for newcomers!

1. If your boat makes a breaking wash, slow down.
2. Keep about 3 boat lengths back from the boat in front, unless they are going so slow you want to overtake, in which case move closer. Wait for them to slow down and wave you past, on a clear straight section of the canal.

3. Look out behind you every few minutes to see if anyone wants to overtake you. If there is a boat behind, warn any boat passing you, if they won't be able to see it because of a bridge or a bend.

4. Slow down to, or near, tickover/idle speed about a boat length before passing moored boats.

You can and should moor your boat more securely by using a spring, a third mooring rope angled forwards from a rear cleat. This stops the boat being swept forwards or backwards by a passing boat, which is what causes an uncomfortable mooring.

The problem with steerers not looking round is a tricky one. I can't believe it when someone steering a slow narrowboat is totally unaware (or chooses to ignore!) another boat just a few yards behind, but it happens. You could use your horn to alert them you're there, but that just seems wrong when we're all trying to relax. I either match them at tickover or moor up for a cup of tea and let them get on with it.

Finally, it's a definite No to speedos on narrowboats - they're all different, as are all the waterways. Any speed is ok, as long as you're not making a breaking wash, and are ready to let faster boaters go past if necessary.

Not only different engines/boats but also different waterways!

I always look at the angle and size of the wash. Wash should come from the bow at between 30 and 40 degrees towards the bank, if its more than an inch high, too fast for passing moored boats. It may need to be less!

If the wash starts to bend, or overtake the boat shallow water, too much speed slow down. Also helps to detect sandbanks!

All boats should have a rev counter this can be used to gauge speed, but varies from waterway to waterway. I use a gps log, so most of the time I know how fast I am going - doesn't work in tunnels and cuttings!

Problem is usually attracting attention. Rely on those in front to judge when best to overtake, doesn't always work!

Some years ago (when I first got the gps) I tested the speed achievable on various waterways in both directions (shown upstream and downstream). This was based on finding the point at which increased engine revs made no difference or actually resulted in going slower (stern dip).

Some views on your questions re appropriate speed:

Q1 Tick-over? Aim to pass boats at a speed consistent with Safe & Considerate navigation. (This is a bit weak and needs explanation to back it up.)

Q2 Golden Rules? Appropriate speed is affected by size & shape of boat; width & depth of waterway; size and proximity to moored vessels; weather & tidal conditions. Answer to Q1 always applies.

Q3 Speedometers? Definitely not needed for private craft; could be fitted to hire boats but speed is affected by so many factors it is of limited value.

Q4 Overtaking? The agreed rule according to the International Collision Regs is to sound the horn; two long blasts to indicate intention to overtake followed by one or two short blasts to indicate the proposed side. No need to advise anything else (all boats have horns) just advise people accordingly ie a sound signal has a defined meaning and is not an indication of anger! In my experience to alert a skipper of an approaching boat behind shouldn't be necessary but can be useful if otherwise distracted.

I generally tell new steerers to visualise they are driving on a slippery road - allow plenty of time to slow down and look well ahead for obstacles such as oncoming boats.

Traditional boats, like heavy lorries can't stop in a hurry - towed boats have no way of stopping!

On passing signals - the Thames signal for passing on the port side is four hoots (= 'please let me past / I want to pass') which should be easy to remember and means that if people go onto a river with commercial boats they already know the signal. The Highway code 'please pass' arm-sweep signal could be used to invite people past.

Having been boating for 25 years an astonishing number of (apparently long-term) moored boats are badly tied with slack ropes. Our home mooring is canal-side but barely moves as boats pass since we have our mooring lines at 45deg with springs fore and aft.

1) Slowest safe speed (sss)

2)

- a) slowest safe speed
- b) when visibility is restricted at bends and bridges speed should be slow enough to allow you to stop in the space you can see.
- c) always slow at narrow bridges incase of submerged debris.
- d) if you are catching up with fit and healthy walkers you are going to fast so slow.

3). Assuming that the cruising setting would be 4mph I would not support speedometers. My objection is that the settings would almost certainly be seen as mandatory and encourage cruising at 4mph at all times.

It may be difficult, but we do need to trust people.

4) if you are not breaking the speed limit then a sound of the horn and a friendly wave are usually enough. (I only have objections to people passing me when I am already cruising between 3.5 and 4 mph and they clearly wish to break the speed limit. If I am having a slow day I am the first to offer them the pass.)

This has irked us at my moorings in XXXX above XXXX lock, as the wide beam boat owners do not seem to realise the amount of water displaced by their boats, particularly when passing moored boats. I have had boats on the canal since 1972 and in those days there were notices everywhere

saying DEAD SLOW PAST MOORED BOATS and even hire boats were compliant. Now it seems to be a free for all, in fact last weekend we had to suffer a speedboat!

Proper tying-up does not work for long because boats going too fast past moored boats stretch the ropes and one would be constantly adjusting them.

Overtaking. Tooting on the horn once, but not frantically and not too close behind, usually works.

Clearly this is a very subjective issue that will potentially never be resolved.

I believe that momentum of the boat is very significant matter and often you can hear that someone reduces engine speed as they arrive at the moored boat and speed up whilst still passing.

However, my favorite is whilst on the Caldon Canal, not noted as a “motorway” of the canals where a senior man shrieked at me to slow down. When I said that I’d been on tickover for several hundred meters he said I must be going too fast because I made his ropes move.

You can please some of the people some of the time!

In answer to your question on, golden rules, boat speed and overtaking, I offer the following:

Overtaking - This is simple. The COLREGs, which all canal boats must use, has a simple sound signal to indicate your desire / intention to overtake to starboard (long long short) or port (long long short short). Of course, this will need people to use that noisy thing at the front which may upset some seasoned continuous moorers!

Golden rules –

1. Never allow your wash to break or overtake you; this is a very quick and easy indication that you are going too fast for the available water (under and around) and it will reduce your control, impair steering and generally be bad for the canal and banks.
2. When you moor up, always use the firmest option - i.e. bollards or rings, Armco and then pins as a last resort. Always have a head and stern breast and a fore and aft spring; this will keep you close to the bank and the springs, which should be tight, will stop you moving up and down the canal as a boat passes.
3. If you can see a boat moored starting to move, you are going too fast; even if it is poorly moored, slow down think of the bank.
4. When you first get going, practice stopping from cruising speed; you will surprised how long it can take, what happens and how quickly you can loose control. Remember it for the real thing, it may save some tears.

Logs - A good question. Personal, I double up my GPS as a log but I only use it as a guide. The problem with a log is that speed limits will be set and then the fore and against groups will demand that they can be met or that they are reduced. As I believe that you have already ascertained the right speed is different for almost every 100yds of a canal or river, I think that boaters need to be informed in the most graphic and simple way possible what is acceptable and unacceptable; in tandem the “ no where to go and all day to complain” crowd need to be reined in and forced to moor

properly. It would significantly help if the Trust provide more good mooring sites and actively discourage the use of pins; they are simply destroying the banks, double pinning is particularly good at this, and adding to the ever increasing repair and maintenance bill - Kennet & Avon is particularly bad for this.

COLREGs specify the sound signal for overtaking other vessels along with other legally binding aspect. COLREG applies to most if not all C&RT waters?

I've had to replace 1 rope as it broke and re-site mooring pins with 3ft scaffold poles (also I have a spring line set up) due to speeding boats on the River Stort.

After over 9 years continuous cruising around the system I follow the following 'rules':-

When cruising when there are no other boats around, either moving or moored, I cruise at up to 4 mph, less if my boat is creating undue wash. I slow for blind corners and bridge holes and when passing boats coming towards me, especially if the canal is narrow.

When passing moored boats I slow somewhat when three or four boat lengths (my boat is 57') from the moored boat(s) and then to tick-over (see below) when about one boat length away. In very windy conditions it may be safer to go a little faster in order to keep my line. I DO NOT speed up again until the stern of my boat is well past the moored boat(s).

I do occasionally come up behind a very slow boat that I want to pass, if the skipper of the boat hasn't seen me I find a short 'toot-toot' and an appropriate hand gesture always conveys the message.

'Tick-over' is a meaningful term, it might be defined as the minimum revolutions at which the engine will turn whilst 'in gear'. Any internal combustion engine has a minimum speed at which it will operate without stalling or struggling. A large old engine may well have a much slower tick-over speed than a small modern engine, but the propeller on the boat will be matched to the engine revs so almost all boats will move at a similar satisfactorily slow speed at 'tick-over'.

I asked this question last time and saw no replies, "Why wouldn't you slow right down for boats that are moored?" What sort of hurry are you in that you would even consider not being courteous enough to slow down when passing moored boats? Even if the boat is securely moored it can be uncomfortable when a boat speeds past.

20 years ago when I had my own boat for the first time there was a courtesy for other users. It was a low proportion of responses that do think boaters should go slower and shows that people are no longer considerate of their fellow canal users.

Regarding the cruising speeds that is an individual's preference, the bottom line is the wash created on the banks, you are responsible to maintain them which highlights the thinking boaters.

The 15 % regarding the moorers responsibility to moor correctly, they obviously don't understand the basics of physics, however well the boat is moored IT WILL move!!!!!!

Tick over is understood by most informed people they are just being awkward and pedantic, have they never heard of their car being on tick over?

Golden Rules

- 1 Most People are on the canals for recreation and pleasure, so do it accordingly
- 2 High revving does not achieve anything, other than using more fuel and making a lot of undue noise, not to mention the more difficult it is to get off if they have run aground.
- 3 Tick over is the only speed to go past moored boats, have you ever been in the shower or with a Disabled person when the boat rocks? Think about it, that's when accidents happen. Let's have some consideration for our fellow Boaters.
- 4 It must be emphasized by the hire companies as well as yourselves on the licence renewals.

Forget the speedo just be aware.

Why not use the horn signals that are recognised by the Port of London and other Authorities.

What is an acceptable way of indicating to the boat in front that you'd like to overtake (given that they may not have noticed you yet)?

As the canals are 'navigable waters connected to the high seas' then narrow boats should follow the International Regulations for Preventing Collisions at Sea (The Rules). (Which is why we drive on the right.)

Rule 9 (e) and Rule 34 (c), (e) state that, to indicate that you wish to overtake, sound two prolonged blasts followed by one short blast to overtake on the starboard side or sound two prolonged blasts followed by two short blast to overtake on the port side. The vessel to be overtaken should indicate her agreement by sounding one prolonged blast, one short blast, one prolonged blast and one short blast. This sounds a bit complicated but is the unambiguous way to indicate your intentions.

I have been a live-aboard boater for 10 years, mostly on the Kennett and Avon, travelling between Reading and Bristol, with summer forays onto the Thames and Oxford canal .

I am also a retired Master Shipwright and have in addition studied Hydrodynamics and hull design.

I wish to say I have huge respect for the work of the Trust, and I actually believe my annual licence is a bargain, (although please don't increase it too much next year!) but having read your recent post titled "Ticking off at tick over" I am sorry to say the points raised are, well, missing the point.

I will address these individually, and then set out what I feel are the real problems caused by excessive speed.

1. Tick over speed varies with each boat/engine combination.

This is of course true, but the definition of tick over is the SLOWEST for any given engine to run efficiently without stalling. Whatever speed the boat is travelling at, if the engine is at true tick over then no more can be expected of the helmsman. They are doing the best they can and no one can ask more than that.

If however tick over on any particular vessel equates to excessive speed, there is a good argument to say that the boat/engine combination is unsuitable for inland waterways use.

2. Tick over is not fast enough.

Not fast enough for what? Commuting/ The emergency Services? Most excessive speed, (but certainly NOT all), can be observed by hire boats and especially day-boats.

I believe the reasons for their undue haste mostly falls into the following categories.

A. They are over-optimistic in their estimation of how far they can comfortably manage in the day/ week/ fortnight that they have the boat.

While 15 miles a day may seem nothing much to an inexperienced boater, when taking locks and travelling past moored boats into the equation, 15 miles a day every day without resorting to excessive speed is impossible and therefore unrealistic. If speed and/or distance covered is a prerequisite of your holiday, I respectfully suggest a vacation on the Inland Waterways are not a suitable choice.

B. Rudder Authority.

Please bare with me, because this requires a bit of science to understand. "Rudder Authority" means the ability of the rudder when deflected from the central inline position to influence the direction of the vessel.

Now for the science. With gases or liquids moving over a wing, spoiler or in our case rudder there is something known as the V Squared Rule. This states that if the Velocity (V) of the water over the rudder is doubled, then the effectiveness, i.e. Rudder Authority is QUADRUPLED. In plain English the means that if the prop-wash over the rudder at 2mph with the rudder at 30 degrees results in a 20kg side-thrust, then given the same rudder deflection at a speed of 4 mph, the side-thrust will be 80kg. That is why it is easier to steer a boat at high engine rpm, and the reason I hear time and again that " the rudder does' not work if I go any slower". It does. and it will.... it just takes a little more concentration and care.

C. Alcohol.

Sadly a too large proportion of speeding boaters are, please pardon the expression, pissed.

Imagine this very common scenario. You hire a vehicle to someone with absolutely zilch experience in said locomotion, whose only training is to watch a short video and (if they are lucky), have a 10 minute chat to someone about how to fill the water tank/ change the gas/empty the loo. I have worked for hire boat companies. Change over day is manic and this is what happens. You then let them loose with the ability, and all too often the urgent and primary intention to get completely hammered and remain that way for the duration of their holiday, Scary eh? Oh, and by the way, said vehicle is 60 feet long, weighs 15 tons, skids all the time and has no brakes.

If it was a lorry everyone involved would be arrested even if they were sober. Add excessive alcohol to the mix and... well you can imagine the outcome I am sure.

3. Do not travel so fast that you cause a breaking wash.

While this is good advice it is also totally missing the point and is hugely misleading because damage to the canal banks and the often-violent disturbance to moored boats and the bank integrity will occur at speeds far below that required to cause a breaking wash.

When a boat travels along a narrow waterway such as a canal, water has to be displaced to allow its progress. Due to the narrowness of the canal this displacement has no other option than to be linear, in other words ALONG the route of the waterway. In addition, when going at even a moderate speed the action of the propeller will “pump” water from ahead of the hull to astern of the hull. If you have been on a boat and watched the water, leaves, ducks etc. as you progress you can see all these travelling backwards when viewed in relation to fixed item. This is most easily seen when going through the pinch point under bridges. The narrower the waterway/the greater the speed, the more this effect is evident. You may also notice that the water level ahead of your boat drops significantly, as water is transferred by the action of the propeller from in front to behind you .

Now imagine you are on moored boat. The first indication that a boat is approaching with excessive speed is that your vessel moves TOWARDS the approaching boat until restrained by your mooring ropes and pins. This can happen long before they are near you. As they pass, your boat reverses it's direction due to the displaced water and water level re-establishing its previous equilibrium. Your mooring ropes and pins will attempt to arrest your boats movement, but 15 tons of boat will all too quickly loosen and pull out the pins, imparting severe damage to the bank.

On busy stretches with soft banks, in holiday time I have had to refix my pins up to 12 times in one day due to this happening. Each time the bank is literally crow-barred apart by the pins working backwards and forwards.

Imagine what a few dozen moored boats weighing 15 tons undergoing this kind of force and resultant damage the crow-bar-like pin will impart on the banks integrity when this happens every 30 minutes, 7 days a week.

I am in no doubt that this LINEAR MOVEMENT cause by passing boats, moving at speeds far less than would be necessary to create a wash is the major contributing component to bank and towpath destruction.

I am passionate about protecting and preserving our unique inland waterways and I would be delighted to meet with the relevant Trust engineers to discuss this problem, show them it in action and take them to locations where the banks and towpaths have been destroyed by it.

Excessive speed not only upsets moored boaters, it is also costing the Trust a fortune in the repair of damage and subsequent erosion of the canal side and towpaths.

Addressing your 4 questions:

1. The point at which the throttle should be closed is the deceleration point, which allows the momentum of the boat to be reduced from 'cruising speed' to 'tickover speed' and the water being pushed ahead to dissipate. The dynamics of fluids in a trunk was a subject that I first encountered - and last addressed - at around the same time as Neil Armstrong walked on the moon; however, I do remember that water in an open trunk (such as a canal) is pushed ahead



of a boat by the hull and the bow wave, and the leading edge of that volume of water can be as much as 200 metres ahead of the bow. The boat should be at 'tickover speed' before reaching the moored boat. If you can read a 'please pass at tickover' before reducing speed, it's too late!

In a crosswind, the boat should be allowed to weathercock – this is a natural phenomenon where a boat will align itself into wind, bow first, unless acted upon by another force. Additional power is required when weathercocking continues to result in a drift towards the moored boat.

2. The golden rules:

First: Always cruise at a speed that does not create a breaking wash and monitor your wash continuously. A change of depth at the canal bank can change a non-breaking wash into a breaking wash in an instant – if that happens throttle back!

Second: Always pass moored boats at tickover – you can't go any slower than that unless you coast, which results in little or no steering. You can always identify tickover by the click made by the morse control.

Third: Always reduce speed when passing a boat in the opposite direction. After passing a boat in the opposite direction, the bow of your boat will always attempt to swing towards the centre of the canal (fluid dynamics again!)

Fourth: Maintain a regular lookout behind for the faster boat. Do this at the end of each straight stretch and you can gauge the progress of the other boat. Don't impede just let them pass on the straight, by indicating your willingness to be overtaken, moving over to the right and most importantly closing the throttle. Keeping power on will prolong the passing manoeuvre and could create a dangerous situation.

A breaking wash creates problems for the future as it scours out the bank and shallows, drawing them into the canal and subsequently reducing the depth

3. Speedometers are not much use at speeds as low as those on a canal. I have several years of empirical data gathered across the canal network by using GPS data to track progress - and it's clear that a simple rule like that proposed is not feasible. Width and depth of the water are key factors affecting speed.

I know that my boat has a 'tickover speed' that varies between 1.7mph and 2.2mph, and it's the depth of water that governs this – the closer the boat baseplate is to the bottom of the canal, the greater the effect of Bernoulli's theorem, and I have a very large propeller that pulls a large quantity of water under the boat. I know that I can cruise many parts of the Grand Union and Trent & Mersey Canals at 4mph and I can cruise certain sections of the North Oxford at 3.5mph, but I can barely manage 2.6mph on some parts of the South Oxford summit and have to remain at tickover on certain parts of the Ashby Canal. Furthermore, a very reliable source of speed information is required to provide accurate speed. My GPS data indicates speed fluctuations occur, sometimes quite wildly, simply because of the coarse nature of GPS data available – while military grade GPS data enable a cruise missile to hit the keyhole of a standard door, the civil grade will enable the missile to hit the door of an aircraft hangar.



Passing moored boats is simpler – throttle closed, listen for the click. But don't try to overtake another boat in this situation.

4. The problem here is that we don't have a comprehensive set of sound signals for use on inland waterways; travel on the Thames Tideway and you'll hear all kinds of different sound signals. The generally accepted sound signal from a boat about to pass a slower boat, is two short blasts to indicate an intention to alter course to the left – my starboard side to your port side. Unfortunately, there aren't many boaters that seem to understand sound signals!!! If in doubt, send a crew member to the bow and get them to request their helmsman to allow you to pass, Of course, there are always those people that feel that their speed is the only way to travel and are not going to let you pass.

I haven't read all the contributions so these points may already have been covered.

1. I believe that there is a fundamental problem with using 'tick-over' as a synonym for 'slow enough' as some boats have such large and powerful engines that, unless they are seriously under-propped, even dropping to tick-over will leave them going too fast. I first became aware of this possibility when crewing for a friend in the BCN Marathon something like 20 years ago. She had what I might call a very average narrowboat, 52' long and about 20" draft, fitted with what would now be regarded as a very modest 27 hp engine. Being a responsible boater she used to drop to tick-over – whatever that might have been (no tacho) – when passing moored boats. It therefore came as quite a surprise to all of us on board when her partner's newly acquired SatNav showed a speed of 2.4 mph, rather than the 'less than 2 mph' we had been expecting, while passing boats moored near the Merry Hill shopping centre. Fortunately, we didn't cause mayhem because the canal there was quite new, wide and deep but it clearly showed that tick-over could be too high. With 40 hp now the norm this problem can only have got worse so many boats will need to slip in and out of gear (as my friend now does) if they are not to cause excessive movement of moored craft and this can only be done by careful watching, feeding into experience. On the other side of the equation, my wife and I have discovered that, presumably as a result of a particularly well-shaped hull, our 57'6" boat on a 30" draft causes very little movement and that we don't need to slow anything like as much as we have in previous, lighter boats. Again a question of observation

2. I'm glad to see the term 'breaking wash' resurface. It is many years since Waterways World ran an extended, if less than totally successful, campaign on this. The basic principle must surely be the governing speed rule for all canal cruising. However, one point that I haven't seen mentioned is the need to slow (or at least keep a closer eye on one's wash and be prepared to slow) when moving to the right to cross an oncoming boat as getting closer to the bank increases the likelihood of producing a breaking wash, even if only for the duration of the crossing manoeuvre.

3. An almost unbelievable story. Sometime back in the 1980s I was heading towards Braunston Tunnel from Norton Junction when I heard the roar of what tuned out to be a grp cruiser with a radome on its roof and a huge outboard behind it, pushing it fast enough to be throwing its wash up onto the (fairly high at that point) towpath. On challenging the steerer about his speed I was told in no uncertain terms to go forth and multiply. He had a speedometer and was doing precisely 4 mph. Unless realistic speed limits, which will change almost by the yard, can be set, speedo's have the potential to cause more trouble than they will ever solve.

Totally agree with the 4 general rules. Maybe the basic [physics] laws of hydrodynamics may be useful in future editions. Examples might include the effect of how bridge width can slow down the boat but increase the speed of water trying to get through [Bernoullie's principle]. The underlying result is erosion of the bridge walls underwater, leading to premature structural collapse. On a narrow canal, a breaking wash may also be indicative that diesel is being wasted; "Less is More". With a deep draughted boat in shallow water, it may also be difficult to give boats room to get ahead.

As a recently retired hotelboat skipper of many years experience (and previously boatmaster of a 72ft Restaurant boat), I am most concerned by some of your conclusions. I hope you will have the time to peruse and consider my fairly lengthy email.

I would like to comment, in particular, on your point on overtaking and use of horns viz:

4. Most people said that horns should be used to signal your intention to overtake the boat in front. A few people quoted COLREGs Rule 34 which says that if you intend to overtake the vessel in front you give two prolonged blasts on your horn followed by, depending on if you're passing the boat in front on its starboard side, one short blast, or port, two short blasts.

In my view this assertion could be most inappropriate in most circumstances, in particular if either of the vessels is:

deep drafted; of heavy displacement; or indeed if the waterway is fairly shallow or restricted, as most are. In particular it will often be the case that the following boat skipper will have no idea or concept of the draft/displacement of the lead vessel.

This isn't mere opinion but based on the physics of displacement (archimedes principle). The assertion infers that control is with the skipper of the vessel wanting to overtake, taking away control from the lead vessel, by mere use of a horn signal.

Let me explain the difficulties here. Where a hull is passing through a channel, displaced water is pushed ahead of the vessel and, particularly in a restricted channel such as most canals, much of that displaced water is pushed to each side of that vessel. Being a restricted channel on either side the displaced water will often move at speed and with considerable force. Importantly the displaced water will then flow back to occupy the space vacated by the moving hull. Mr Archimedes in moving action. You will hear people refer to 'stealing a boats water' - it's a similar effect.

The movement of that displaced water has greater effect if the vessel is deep drafted or of heavy displacement, because a 25 ton boat will move/displace 25 tons of water, rather than perhaps a typical 57ft boat which might weigh just 18 tons displacing that lesser amount of water (eg our ex-hotelboat Willow is 25 tonnes and a traditional loaded workboat might displace twice that). Such



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movement of heavy amounts of water in a restricted channel can impact forcibly and heavily on other vessels. This latter point is crucial to understand because the water filling in behind a heavy narrowboat will form a current to pull the lighter bow of an overtaking boat into the side of the heavier vessel. The effect is more apparent if the canal channel is shallow or restricted, or if the overtake is 'at speed' (25tons of water can be pushed slowly or rapidly depending on the speed of the vessel - it's also why we need to slow the hull speed of our vessel going past moored boats). Anecdotely, I recall a racing canoe on the Basingstoke canal attempting to closely overtake my fully laden Restaurant boat (probably weighing 35tons). I was at cruising speed and as he came by, at speed, he was suddenly drawn into the counter of our restaurant boat and became 'glued' to our steelwork. I had to slow up and go in reverse to release him. He was not best pleased but totally to blame. Mentioned merely to illustrate the effect.

So to infer that a typical 57ft narrowboat can merely give a horn signal and demand any overtake of a heavy deep drafted boat, on any waterway, is hugely irresponsible and unwelcome. I understand that an average 57ft narrowboat may weigh about 18 tonnes and draw 1ft 8ins at the stern. Willow and many other trad narrowboats, at 65 to 70ft in length, may draw between 2ft 6ins to 3ft. The differences are very relevant.

That is why the old etiquette was always that it was for the leading boat to decide whether or not an overtake was appropriate, because that skipper is likely to be better informed of the circumstances/suitability. For example a light weight vessel could perhaps easily pull over to allow a following boat to pass, but a deep drafted vessel must have the option of refusing to allow the overtake, or a collision could occur when the passing boat is sucked into the side of the lead vessel. It may be that the larger deeper drafted vessel cannot pull to the side without going aground. If the lead skipper considers an overtake is appropriate (as often it may be), he can signal the following boat to come past, but it's his or her decision, not for the following boat. Indeed whenever we on Hotelboat Willow were invited to overtake a slower boat, my wife at our bow would always verbally advise their skipper to be aware that Willow might pull the bow of their vessel into the side of Willow, particularly if they lost steerage by going into neutral. We would then overtake, but only at a conservative speed to minimise the pull/draw effect.

I would prefer your advice to be that "the a slower boat should consider allowing/inviting the following boat to overtake, if appropriate and safe to do so in the circumstances". Most experienced commercial boaters would not be overly impressed with a following boat coming up behind blasting their horn, demanding an overtake. Many would share my own reaction of signalling 'sod off' (polite version).

In general terms I think there is a danger of making too many hard and fast rules which the novice may interpret as being rules of law to be obeyed in all circumstances. Of course boats should pass properly moored boats at an appropriate hull speed so as to avoid causing avoidable inconvenience to that vessel.... But that will vary depending on the types of vessels involved and the characteristics of the waterway concerned. 'Tickover' is only a guide, hull speed being the real factor.



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On the subject of horn signals, I rarely use them. This is because I may know the correct signal according to the manuals, BUT it is an almost guarantee that hireboaters or even shared ownerships will not know the true meaning of the signals. How many times have I heard, even private, boaters giving 3 blasts of a horn (officially meaning 'I am going in reverse'), as they force their immergence out at a 'T' junction or blind bridge. The proper method would be slowly to proceed carefully at a speed where you can stop abruptly if required - not charge through with a blasting horn. Many assume that if they give a horn signal it gives them a 'right of way' - it does not (merely a warning of presence or on rare occasions a signal of intent), so in the hands of a novice it can be a dubious practice when not fully understood. A communication that is not understood by both parties is worse than useless and makes our gentle canal cruising much less attractive. Remember that horn signals were initially designed for maritime use at sea or navigable rivers, where the lack of a narrow channel made that type of communication necessary. Far less useful on a narrow canal.

I have just returned from a short trip and been bothered by people who should know better about passing at speed. When I commented (necessarily rather loudly) that they were going too fast they both responded "I am on tickover". "Tickover" is a maligned term and boaters (including the two who were obviously owners) just do not understand the physics of the situation and they should. The problem is not what your engine is doing but the speed at which you are travelling. I heard one of the boats turn their engine down to what was their "tickover" a mere boat's length from where I was moored. The resulting reduction in speed was negligible and they went past me far too fast. The moral is to slow down at least 10 boat's length from the moored boat. Then they will be going slowly enough.

Probably all been said already but I have just come home with this fresh in my mind – I do not expect such boaters to take any notice or to read anything. When someone comes past going at what I consider to be a reasonable speed then I try to say thank you. Maybe the message will get through eventually!!
