

- ▶ Has something ever taken you by surprise whilst riding?
- ▶ Could you have seen it earlier?
- ▶ If you had seen it earlier what would you have done about it?

Observation and planning issues are central to the whole concept of defensive riding. If you don't see things as early as possible, you are making life hard for yourself and ultimately less safe. This download is intended to identify some points that may help you develop your observation and planning skills.

Observation & planning issues are covered in much more detail in the police Roadcraft manual which is published by TSO and is available at all good bookshops. We highly recommend that you follow up all our free downloads by reading 'Motorcycle Roadcraft'.



Please note: Whilst most of our downloads say that they are not aimed at learner motorcyclists, this one is just as relevant to learners as everyone else. The more you see and the earlier you plan to deal with it, the safer you will be. Read on but do please discuss the issues with your instructor for more advice.

Disclaimer – The information contained in this download is based on established information laid down in the police Roadcraft manual and is intended as general advice only. Essex Casualty Reduction Board accept no responsibility for any damage or injury howsoever caused by following this advice.

Observation and Planning

The Hugger Rider Skills downloads are not designed as 'advanced' riding advice, just an examination of good practice but when people talk about advanced riding, their minds often picture machine-handling skills, cornering lines and so forth. What may not be immediately apparent is that advanced riding skills start with observation & planning. What you see, how early you see it and how you plan to deal with it makes all the difference. Observation and planning skills are central to improving your riding. It doesn't matter how good your reactions or your machine skills are, if you are seeing things late you are making life hard for yourself.

Remember that early observation of hazards together with planning to deal with them gives you the essential elements to safe riding

Time to React



Doesn't everyone already do this?

Yes, up to a point! Everyone is looking out for problems each time they ride but experience over the years has been that after a Safe Rider course or similar, riders often comment that they are seeing more, and much earlier, than they were before the course. This is normally just by being better focussed and actively looking for information rather than waiting for the information to come to you.

It's not difficult, but looking further afield often requires some conscious effort initially after which it quickly becomes second nature. We will try to cover some of these issues in this download but doing some form of rider development course would be helpful to put this into practice. Your local options are outlined at the end of this document.

Taking in information through observation skills may sound basic but it is a learned skill not an instinctive one. If you have taught an offspring to drive you will know what we mean. Whilst they have quick reactions because of their age they often fail to see hazards and react very late to things that were there to be seen and would have been by a more experienced driver/rider.

Like so many aspects of defensive riding, it is not complicated, just the simple application of basic principles and techniques. The reason that the police system has endured is that it is based on common sense. Observation and planning are good examples of the application of this common sense approach.

Observation and Planning



Taking in information

Concentration & Scanning

In order to take in the maximum information from your environment the two critical aspects are:

Concentration



Your mind may have drifted off to other things but you must concentrate on your riding...



If you are not concentrating on what you are doing and your mind is wandering elsewhere, you cannot hope to pick up potentially vital information clues.

Scanning

Move your vision and scan the whole environment including the rear.

If you are not scanning by moving your vision about in all directions until something draws your focus, clues will go missing.



Observation and Planning



Pieces of a jigsaw

If you look at a scene, think of it as a jigsaw puzzle. The more pieces of the jigsaw you can put into place, the more of the overall picture you will have. If it's a bend that you can't see round, you won't be able to have the full picture until the bend opens out but the more pieces of the puzzle you can put into place the better prepared you will be.

Our higher viewing position on a bike gives us a considerable advantage over car drivers, in being able to see over hedges and banks gaining more

information about where the road is going or what hazards may be lurking. If you adopt a tunnel vision approach for example, just concentrating on the limit point (See Cornering Download) you will have wasted that information that you may have obtained by scanning wider.

You may have to initially force yourself to get your head up from the foreground and turn it much wider to pick up some clues. After a while it will become instinctive.



If you have only scanned part of the scene, you will be missing potentially vital information!

Observation
and Planning



Observation and Planning

Looking out for early signs of emerging vehicles.
Move further away from the nearside to create a safety buffer

Top of oncoming goods vehicle partially obscured by hedge but there to be seen.

Farm buildings

- Giving a good clue of the route that the road takes.
- Obvious potential for danger from vehicles moving in and out of the farm.
- Possible presence of livestock, cats or dogs.
- Possibility of mud or other surface debris

Which side of these cottages does the road go?
They are a long way off but the information is there for you to consider



What might I be looking for?

Here are just a few examples

- Clues to where the road may be going from the wider views and limit point (see cornering download).
- Early warning of an oncoming vehicle on a bend.
- Early warning of a slow moving vehicle or a traffic queue ahead.
- Vehicles approaching from side roads or driveways.
- Pedestrians crossing in front of parked vehicles.
- Smooth metal inspection covers that you wish to avoid in the wet on bends.

The list is exhaustive and the circumstances infinitely variable.



Diesel, you can often smell it before you see it!

Taking in information is not just about what you can see, hearing is useful listening out for a vehicle horn on a narrow road, or emergency vehicle sirens for example.

Smell is useful too in detecting such things as diesel, often before you can see it, or freshly cut grass indicating grass or hedge cutting going on somewhere in the vicinity.

In taking in all this information you will need to filter it, discard what is not relevant to you at that time and focus on the more important things. Movement in your peripheral vision will tend to draw your attention to things that may be of interest to you. Peripheral vision reduces as speed increases.

Observation
and Planning



Making the best use of observation

You need to train yourself to scan in all directions and distances. For forward observation you need to scan the far distance, the mid ground and the foreground. Move your vision around until something requires you to focus on it as your primary and most immediate hazard.



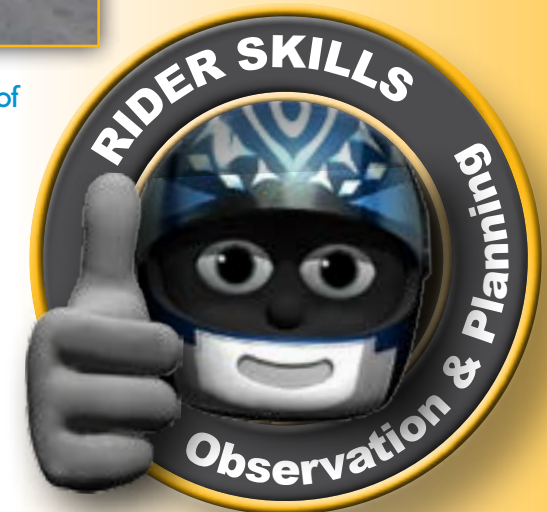
Your vision is naturally projected further ahead. Because of the absence of any foreground hazards

How far ahead you look will depend on the speed you are travelling and the frequency of the hazards. For example, in a densely populated urban area with hazards coming at you thick and fast in the form of pedestrians, cyclists, vehicles, junctions etc, what is happening half a mile down the road is of very little interest to you compared to that going on all around you. The hazards half a mile away may well be of great interest to you eventually but not yet, your greatest threat is much closer to you. Prioritising hazards is a central part of planning which we will come onto shortly.



Your vision is focussed much closer to you because of the close proximity of hazards.

Observation and Planning



Rear observation is very important and for the most part will be mirror based. Blind spot lifesaver checks are very important to make sure nobody is overtaking you as you move out to overtake a hazard or turn right. Look behind you as often as necessary to always be aware of what is behind you, but always before you alter position or speed.



Blind spot checks can be made at a safe, sensible point to maintain peripheral vision ahead when there is no immediate threat. An example of this would be making your blind spot check prior to overtaking before you move up into the overtaking position and thereafter relying on accurate use of the mirrors since you would not wish to take your eyes off the vehicle ahead when you are close to it. You don't need to twist your head like an owl, use your mirrors and glance into the blind spot not covered by them.

Planning

Seeing something through the use of good observation is obviously only part of the process, having seen it you then need to plan to deal with it before it becomes an immediate threat.

Planning involves

- Anticipating the hazard
- Prioritising the hazard according to which is the closest or most immediate threat
- Deciding what to do about it.



Observation and Planning



In the first photo the rider has identified three immediate hazards, the side junction with a restricted view into it, the right-hand bend and the oncoming goods vehicle. Under normal circumstances, if the junction was not there, or it was wide open with no restriction to visibility, the rider would take up an early position to the nearside in preparation for the right hand bend and keeping well out of the way of the goods vehicle.



Anticipating the possibility of a car suddenly appearing at the junction the rider should prioritise that hazard, being the most immediate threat, before dealing with the bend and the oncoming vehicle. The rider will adjust position accordingly and possibly speed to give a safety buffer from the junction before getting into position for the bend.



In this photo the rider has lined up for the bend ahead rather than dealing with the junction hazard first

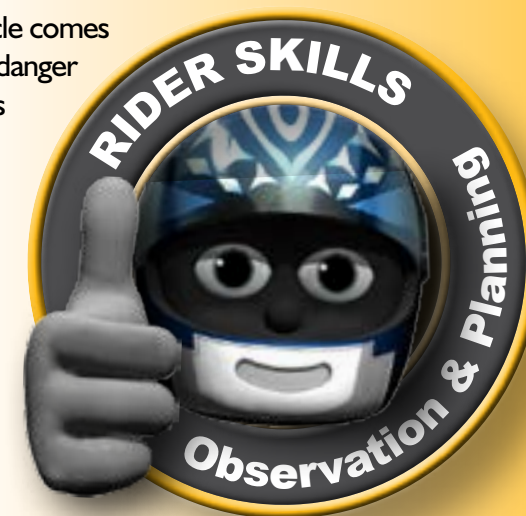


This photo shows the rider prioritising the hazards and creating a safety buffer away from the nearside junction which also increases visibility into the junction. The rider may also consider a reduction in speed. Once the visibility into the junction opens out as the bike gets closer, the rider can then consider moving back towards the nearside in preparation for the right hand bend and also to give a safety buffer from the oncoming goods vehicle (no longer visible in this photo).

If a vehicle appears at the junction as the goods vehicle comes round the corner, the rider will have to equalise the danger and reduce speed. If the space around your vehicle is reduced, you've got to consider losing speed. Don't put yourself in danger from an offside hazard just to get out of the way of one on the nearside or vice versa.

Anticipating the hazard is critical and will require a conscious effort.

Observation and Planning



Road positioning for better information

In our download on cornering we looked at road positioning to get a better view into the bend as long as safety and stability were not compromised. In our overtaking download we looked at the advantages of being on a motorcycle and being able to gain views along the nearside of a vehicle in order to maintain a good view of the road ahead. This also required us to keep a good distance back from the vehicle ahead to, amongst other things, expand our view beyond the vehicle.

Keeping your distance

It stands to reason that a much better view is obtained by keeping a good distance back. It is a common fault amongst all categories of vehicle users.

The advantages are fairly obvious

1. You extend your view beyond the vehicle in front
2. You extend your braking distance
3. By giving yourself more time and distance to brake you also give the driver behind more time to respond to the fact that you are braking. Remember that your bike will lose speed more rapidly on a closed throttle than virtually any car so consider showing a brake light to alert the driver behind to what is going on.



Observation and Planning



Road Signs

Road signs are not just things you need to learn to pass your test, they give you vital information that you need to build into your riding plan. You need to spot them, assimilate the information they contain and plan to do something about them. We are not going to delve into an analysis of road signs but some classic examples that are very important to you as a rider would include;

- Advanced warning of a junction, particularly on a bend.
- Advanced warning of a bend.
- Chevron boards indicating the possibility of a sharp bend.
- Centre line hazard markings indicating a hazard of some description, possibly a junction.
- Slippery road surface.
- Wild animals (collisions with deer are an increasing problem for all road users but collisions with deer and pheasants have killed several riders in Norfolk in recent years).

If you ride oblivious to the information that road signs provide, you are making life hard for yourself and your reaction to the hazard may be late.



Local knowledge

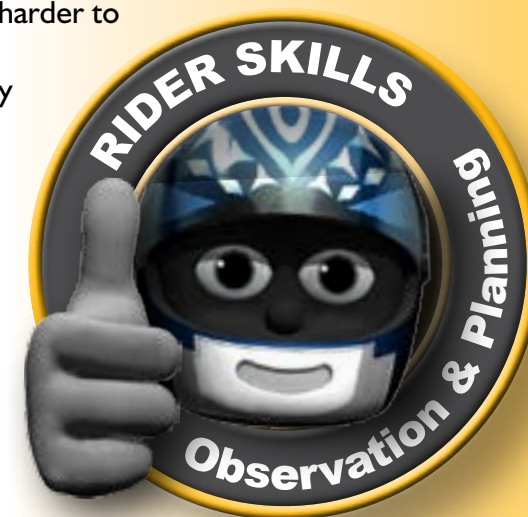
In some of the videos in our overtaking download we mentioned the use of local knowledge in identifying potential areas where overtakes may be possible. Local knowledge can be a great help to you in identifying potential areas to overtake or knowing that a particular section of road is notoriously mud strewn due to being near a farm and so forth.

Local knowledge can also be a considerable disadvantage if we ride expecting the situation to be the same as it normally is. There is a tendency for people to ride according to what they expect rather than what they can see.

A good example might be where a rider is on a familiar road and knows that it is possible to ride a particular bend at 40mph, but there may only be sufficient vision to allow a 30mph cornering speed in order to be able to stop in the distance that the rider can see to be clear. The rider is then trusting to luck. This comes into sharp focus on the day a vehicle is broken down just around the bend, something has fallen from a vehicle or someone is riding a horse ahead of you. There is a view that riders tend to ride better on roads they don't know because they are having to work harder to read the bends, assess the hazards and ride according to what they can see, not what they expect to be there.

Something to think about!

Observation
and Planning



Observation Links

Over a period of time you will have built up a collection of observation links where you can predict the likelihood of a hazard developing from clues that you have observed.

Observation and Planning



Bus at a bus stop
May pull out
Pedestrians may emerge

Ice cream van parked
Children emerging from
behind it

Dual carriageway entry
Fast vehicles joining
carriageway with limited
vision or vehicles in lane 1
forced to move over

Parked vehicles
Vehicles moving off,
pedestrians emerging,
doors opening

Goods vehicles on
country roads loaded
with sugar beet or grain
Possibility of beet or grain
on the road

Smell of organic
fertiliser spread on
adjacent fields
Likelihood of emerging
farm vehicles or deposits
on the road

Grass cuttings on the road
Likelihood of hedge trimming
vehicle around the bend.





Examples of observation and planning

The video clips highlight just a few examples of observation and planning. The subject is huge and covered in great detail in Motorcycle Roadcraft

Remember to make the most use of your advantages, take views both sides of vehicles and over hedges to take in as much information as possible. We discuss this in our overtaking download.

Making progress in the urban environment through good observation and planning

By assessing the traffic situation a rider can make good progress in the urban environment by scanning further ahead and working out the best route through. By assessing the best route at an early stage the rider can adopt that avoiding last minute lane changes or decisions.



Making progress through observation and planning



Observation and Planning



Summary

The subject of Observation and Planning is vast and is well covered in Motorcycle Roadcraft. We are not going to delve any deeper here but would suggest you read Roadcraft to expand on the basic points we have highlighted.

It will significantly improve your safety as well as the enjoyment of your ride, if you are not coming upon situations having failed to spot the clues early enough. It will remove tension from your ride and you will assume an air of calm efficiency.

Remember that concentration and scanning are central to getting the most information out of your environment. If you find it hard to concentrate try giving yourself a commentary to focus your attention on what you are seeing. Like any skill it will become easier the more you practice. As you approach a bend, force yourself to turn your head to encourage searching for clues, after a while you will do it automatically.

As with all the rider skills downloads, the underpinning theory needs reinforcing with a practical element. Having read the theory it would be very useful to put it into practice.

To improve your rider skills and get more fun out of your riding, why not take the three part 'Hugger' challenge which comprises: Bikesafe with Essex Police or Firebike `Better Biking Day` with Essex Fire and Rescue, a day with one of our Advanced Rider Trainers and your riding at an Advanced off road skills day

Details are available on www.drivingcasualtiesdown.org or you are welcome to email us on road.safety@essex.gov.uk.



Observation and Planning