

DRIVE IT!

Doune



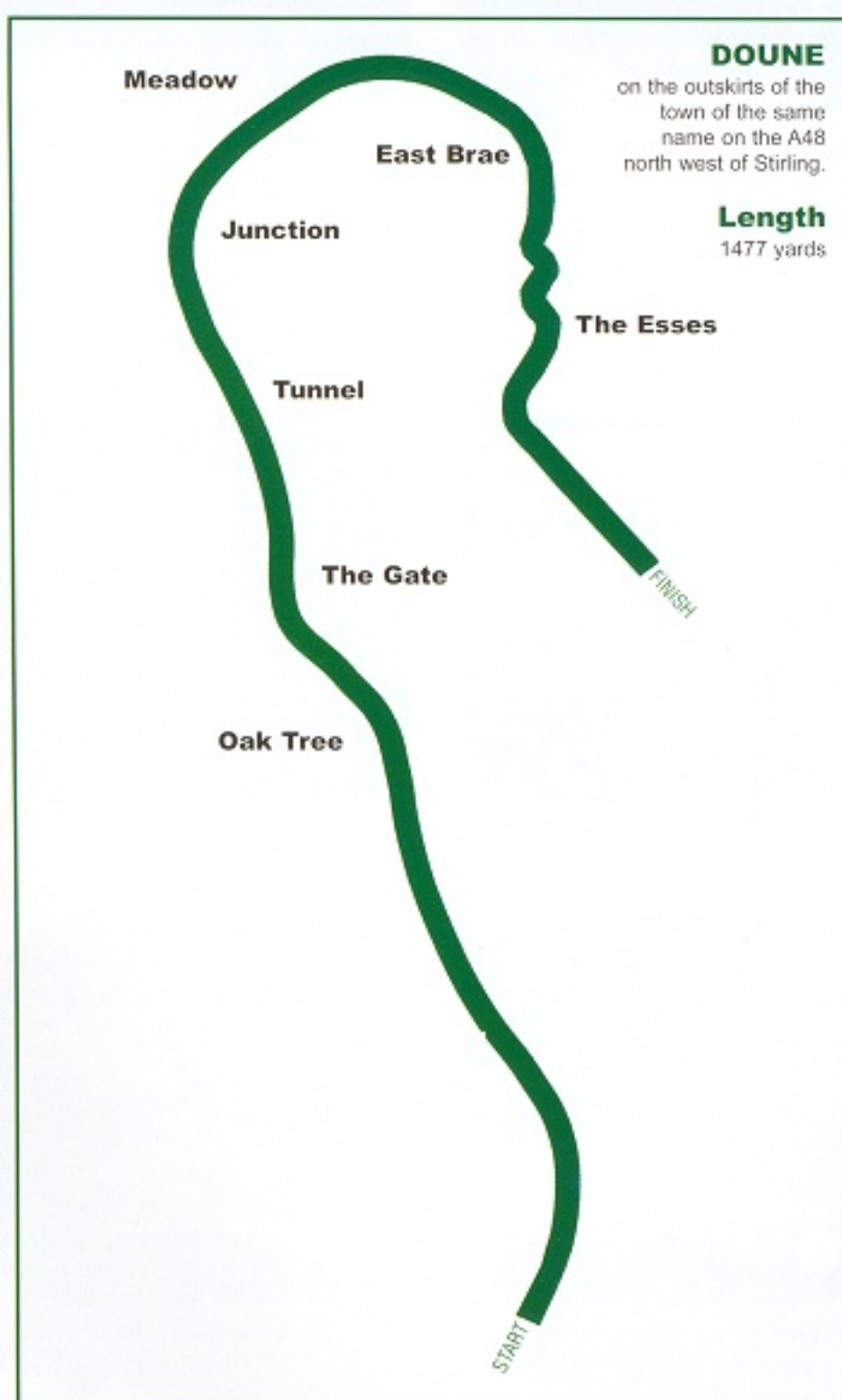
OMS-Yamaha driver Jonathan Rarity's bid for the outright Scottish Hillclimb title ended amid a three-way fight at the very last, very wet, round. A mistake on the very last corner of the Championship cost him any chance of the crown, but even so the Helensburgh driver had taken the Scottish Speed, the Scottish Top Ten Sprint and the Scottish Highland Championship titles, and at the end of a superb season in his 1-litre single seater was deservedly awarded the Paul Squires Memorial Trophy by the HSA. The stage for that last, crucial Scottish Championship round was Doune, regarded by many - if not most - people in the sport as the ultimate hillclimb challenge. Jonathan describes his technique for tackling this most demanding of venues; the acknowledged 'King of Hills'

1999 was the year I started speedsport. I'd bought and rebuilt an old crossflow powered Westfield and once it was finished, everyone told me I should race it. No thanks, having someone else plough into my newly refurbished pride and joy was never going to happen. 'So why don't you try hillclimbing and sprinting?' they said. This was more like it. It was September 1998, and having once decided to have a go, I then immediately told everyone my intention. Now I couldn't back out.

So there I was, in the paddock at Doune Hillclimb. It was April 1999 and it was wet - what an introduction to the sport. In fact the sun came out in the afternoon, over the course of that weekend I lost my virginity to speedsport, and it's been a love affair ever since. Yes, you did read that right; the words sun and Doune in the same sentence. It certainly can be sunny at Doune, but we only arrange that for the local events. Wouldn't want you National boys being spoilt now, would we!

Having completed two seasons in the Westfield, I bought my OMS single seater which is the car I drive today in both sprints and hillclimbs. Having missed a total of only four events over the last five years, I think it's safe to say I quite like the sport... It's only when I reflect on those first timid runs up Doune in comparison to today's full-on, committed attacks, that I realise just how long it takes to master the King of Hills.

My car is a late nineties OMS, powered by a tuned 1000cc Yamaha Thunderace engine. It's a few



generations old now compared with the modern engines producing around 145bhp, but it was one of the lightest and smallest engines of its day. Weighing in at a mere 63kg it was a good choice for the OMS chassis. Where the 'big banger' single seaters approach Doune's corners with the aim of getting their colossal power down on the road, the small bike engined single seaters carry momentum and corner speed. This is my technique.

When dry, the start line is usually consistent in grip so I normally line up just to the right of centre in anticipation of the green light. The first corner is one of the most important, yet most underestimated, on the entire hill. Unless you can pull the perfect start every time, your entry speed into this left-hander is rarely the same twice over. Not so important in itself, I hear you say, but the exit is absolutely crucial as you're then on full throttle right the way up to Oak Tree. While the large single seaters tend to take a tighter line to combat understeer at the exit, I find a wider, later turn-in better suited to the smaller car. The exit is ever so slightly off camber and a slide here, or worse a slide and a lift, can have a huge effect on the run to Oak Tree; the wider line (and later apex) allows you to feed in the power from turn-in, powering all the way through to the exit.

From then on it's flat out up through third, fourth and fifth gears approaching the blind yump just before Oak Tree. In practice, I tend to feather here as it takes nerve to hold a flat throttle. You need to be tight in to the right, as the car jumps three or four inches as you go over the crest.

Oak Tree and Garden Gate have to be the two most daunting corners I've ever driven. If they were marked out in cones on a flat airfield you'd fly through them, but in reality they both have blind apexes and blind exits, so memory, experience and commitment are the name of the game here. Approaching Oak Tree in fifth is just over 100mph in my car, so if it goes wrong here you just know it's going to hurt. With a fast entry and opening exit, the crucial point is the turn-in. Too soon and it's all too easy to hit the inside Armco, too late and you'll run right round the wooden wall. Still holding fifth, a confidence feather is all that's required on a competition run, turning in and committing the car to that line. From that point on you can't change it, but when you get it right there really is no real drama. Just let the car run wide, with no sudden movements that could unsettle it before Garden Gate.

Garden Gate is all about commitment, regardless of car. The big single seater drivers want their cars stable and in line so they can plant all those horses, the smaller cars need to carry as much momentum as possible as the following Tunnel section is where the bike powered cars really suffer. They just don't have the same sheer grunt to haul them up the hill, so carrying speed is the number one priority. The gearing on the OMS means I have to downshift to fourth for Garden Gate which, if done too late, will have the back end out and thumping the Armco in an instant. My technique is a quick downshift and a dab on the brakes, then back onto a light throttle *before* turning in. Again a late turn-in here is a necessity, but you have to have confidence in the front end of your car to maximise this. Understeer now and it ain't going to be pretty! Turn in on light power then smoothly squeeze the throttle, pacing the throttle movement to the corner so ideally you're on full gas just as you exit it. If you've got your entry speed right into Garden Gate you'll know it instantly. If you've gone in too slow you'll be kicking yourself all the way up the Tunnel as there's nothing you can do about it. If you've gone in too hot, you'll be waiting for the recovery truck to come and take you back to the paddock!

For the bike engined cars, the tunnel is reasonably easy. It's flat out all the way with just a hint of wheelspin and a small amount of lock as you go over the yump. In the wet it's a different matter and demands a lot of respect.

Junction, to me, is extremely frustrating and I'm still not convinced I've ever got it right. You have an almost blind turn-in, with a very small double apex and a change in camber as you come over the crest into the open. I reckon it's so easy to get this corner wrong because you always think you can go a little bit faster the next time. You never come out of it thinking you were on the absolute limit, but the trouble is there's no warning when you actually reach the limit. That's probably why there are so many spins there. But you have to push, because it's the all-important feed into the long right-hander across the Meadow.

The Meadow is very deceptive to anyone who's not driven it. It looks

like a long right-hander but it's way more complicated than that. It's almost like a five apex corner that banks in the middle, flattens out, then tightens at the end. Your right foot may be planted for most of it, but your hands are working overtime on the wheel, thinking well ahead so that you're in the right place when it tightens at the end. Because of the banking, you can just accelerate all the way through it with phenomenal grip, but it wouldn't take much to suddenly find yourself running out of road at the far end.

East Brae. OK, who thought of that then? 'Yeah, let's give 'em a hillclimb. We'll line it with trees, armco and a stone wall. We'll make all the corners blind with no kerbs and we'll put in a couple of yumps to keep 'em thinking. Oh, and we'll give 'em this really long, constantly changing, 100mph plus right-hander - and then we'll stick an 85ft, one-in-three hill at the end with a blind, second gear, ninety right at the top! It's amazing how many people don't bother going past East Brae when they walk the course because of the sheer effort required just to ascend it. East Brae is where the money spent on those dampers (and bump stops) is justified. The approach from the Meadow is in fifth and the car compresses *hard* as you hit the bottom of the hill, grounding as you start the ascent - any bounce here and you're off playing with the rabbits. As a result of this compression you can jump as hard as you like onto the brakes, but you have to back out of the braking otherwise you'll lock up as the car levels out. Down three gears, then turn in blind using the first kerb you've seen all day. I try and treat the exit of East Brae with respect. The road falls away where the ground has been gouged by the over-zealous, so running even a little wide will harm your time. My theory is that you can only lose time at East Brae, not gain it, so a little patience is required here before hitting the power and changing up to third for the Esses.

Only the Esses to go. Easy, eh? This is Doune, remember. The Esses is a right/left chicane, lined with Armco and apart from just prior to the entrance, there are no kerbs. The exit is tighter than the entrance, so somewhere in there you've got to scrub off some speed. My approach is just to touch the left kerb before the entrance and try for an entry speed that may not be as fast as is physically possible, but which allows the car to flow through without any sudden throttle or brake applications and enables to me position the car for the smoothest exit on the run to the finish. Again, the temptation to floor the throttle exiting the final left must be resisted until the car is settled as many people, including myself, have come to grief here within in sight of the finish line.

Well, that may not be the right way, it may not be the wrong way, but it's my way of tackling Doune Hillclimb - which I still love just as much as I did on that weekend back in 1999.



1 The first corner is one of the most important on the entire hill



2 The exit - now you're on full throttle right the way to Oak Tree



3 The crucial point at Oak Tree is the turn-in



4 Just let the car run wide, with no sudden movements



5 Garden Gate is all about commitment, regardless of car



6 Smoothly squeeze the throttle so you're on full gas on the exit



7 If you've gone in too slow you'll be kicking yourself all the way



8 For the bike engined cars, the Tunnel is relatively easy...



...it's flat out all the way



Junction - an almost blind turn-in, very small double apex and camber change



You have to push, because it feeds the long right-hander across the Meadow



The Meadow - a five apex corner that banks, flattens and tightens at the end



East Brae. OK, who thought of that, then?



The car compresses hard as you hit the bottom of the hill



You can jump as hard as you like on the brakes



Down three gears, then turn in blind using the first kerb you've seen all day



Treat the exit of East Brae with respect



Only the Esses to go. Easy, eh?



The Esses is a right/left chicane, lined with Armco



Touch the left kerb before the entrance...



... try for an entry speed which allows the car to flow through...



...without any sudden throttle or brake applications...



...position the car for the smoothest exit on the run to the finish



Resist the temptation to floor the throttle until the car has settled



Many people, including me, have come to grief within sight of the line



The King of Hills - the finish at last!