Weather History in the Teign Valley

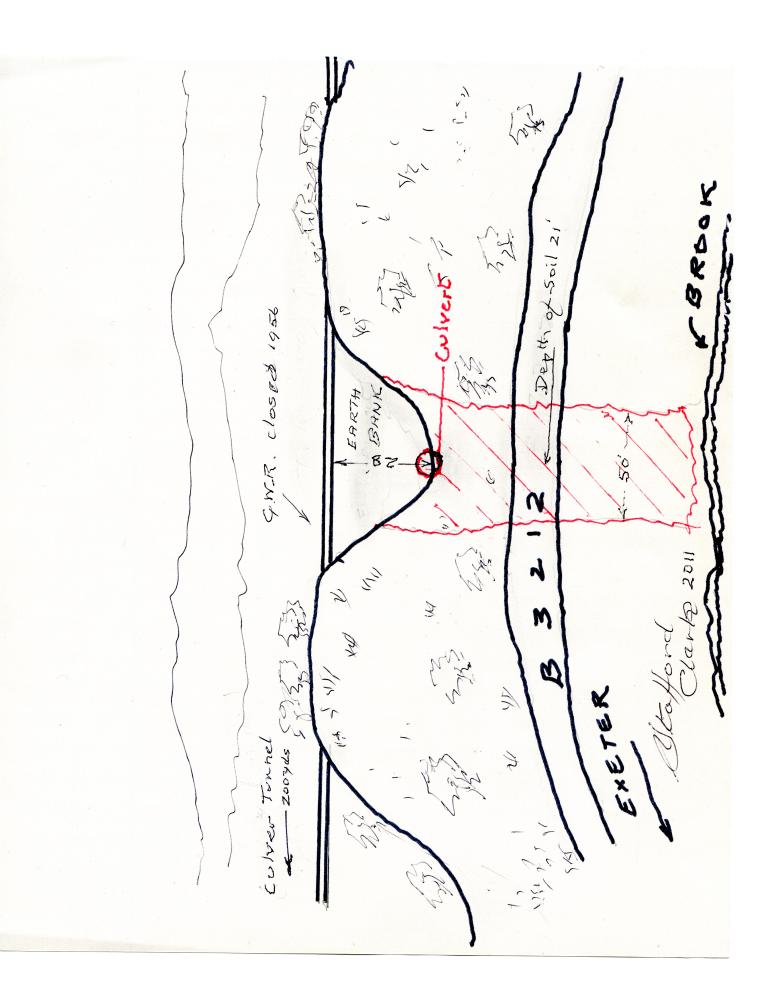
Che Serra

Those of us who live in the Teign Valley live here because we love the beauty and tranquillity of the area. Not for us the hustle and bustle of city life or even the convenience of the facilities available within the environs of a small town. We choose to accept (or ignore) the problems that our isolation from mainstream society can compound when we are in the throes of extreme weather conditions that, randomly, have affected us all throughout history and, as the climate changes, will undoubtedly increase in regularity. Our vulnerability has been amply demonstrated on 3 occasions in recent years in one particular area — our lifeline road down to the Chudleigh area and the A38. These were 2 landslips at the same spot and the erosion of the river bank.

Landslips

Soon after passing by GM Coachwork towards Chudleigh there is a high bank on the right. According to Devon Highways Superintendent, Ian Sampson in an email dated 12.04.2010, 'the landslip has been caused by a build up of water under a section of the hill side, this geotechnical fault caused the field some 150m back from the hill side to fall approximately 1.5mm in height, pushing the toe of the hill out and over the top of the gabions and onto the (Teign Valley) road'. This happened also in 2001 when, after a long delay necessitating traffic lights to be placed around the problem area, gabions (large rocks, caged) were positioned at the foot of the bank to hold it in place. Unfortunately this did not last long and this Spring, following a period of heavy rain, a catastrophic landslip took place that caused thousands of tons of mud to pour down the hill side, engulf the gabions and spill out right across the road. Miraculously no one was passing by at the time so no one got hurt. It took several days for the road to be cleared and getting in and out of the valley to the south proved to be challenging. The wet ground caused the narrow lanes used as alternative routes to become treacherous as passing places were created in the tightest of gateways and pull-ins. The alternative route, suggested by the Highways Department – via Bovey Tracey and Moretonhampstead - was undoubtedly safer but totally impractical in terms of distance, time and fuel consumption. Some months have now gone by yet the inevitable traffic lights remain by the area where the landslip occurred, forcing motorists to wait under the next section of hill which must surely now be unstable? Apparently negotiations are taking place between the Highways Department and the landowner who lives in France. Last time this took months; this time appears to be a repeat. Meanwhile the traffic lights remain a constant irritation to commuters - except at weekends when the cones are regularly pushed aside.

In 1958 a landslip took place at the other end of the valley, at Culver. The main road to Moretonhampstead was closed for 4 days. It is, therefore, theoretically possible that landslips could happen again, simultaneously, either end of the valley.



River Bank

The power of the River Teign or the weight of the vehicles that now travel up the valley road, be they the lorries associated with the quarry at Trusham or the vast tractors bringing equally vast trailer loads of compost to the farms above Christow or the massive forestry vehicles that take the timber from Canonteign Woods and the woods around the reservoirs - or a combination of them all brought the road on the last stretch to Chudleigh to a point of near collapse in 2008. Many months of remedial work were put in but, as one resident was told by a member of the work force, 'we're fighting a losing battle.'

Problems more directly caused by extreme weather conditions are floods, drought and snow.

Floods

Above average rainfall causes flooding which in turn creates above average problems for valley residents. Those of us living in the higher villages are unaffected so long as we have managed to get home before the rain and are sufficiently well organised to have supplies in and lucky enough not to have any urgent medical appointments, crucial work commitments or family crises taking place outside the area. Heavy rain tends merely to be a temporary inconvenience where immediate plans may have to be postponed. It might also cause unforeseen problems ie where you drive around a corner and find your car immersed in an unexpectedly deep puddle of water (eg at the Engine House at Canonteign) causing the engine to flood and the car to stop.

When the river floods, some houses along its bank will be flooded also, an event which inevitably leads to the residents needing to find alternative accommodation whilst the battle commences with the insurance companies and the remedial work is done. For the vast majority, however, flooding creates merely a temporary inconvenience. Not since 1960 has flooding caused major problems here.

At the end of 1959 the ¹Nuffield Farm Project set up 11 weather stations in Devon, some around the Teign Valley. 'The drought that year was followed by a year of very high rainfall. In the 12 month period to October 1960, the total rainfall at Laployd Barton was recorded at 80in with Higher Ashton at 69in. Throughout the district more than 20in fell in September and October which represents 50-80% of the average annual total with 5in falling on 29th-30th September alone.' At that time the railway was being disbanded and any hope that the Teign Valley Line would ever be re-opened was abandoned when the line was washed away at Trusham.

The last Wednesday of September brought 6 hours of continuous storm. The River Teign, already running abnormally fast, rose to bank level by late afternoon but, once again, the rain eased by Thursday morning.

²On Friday 30th September the valley children set off for school in Newton Abbot. Dark, heavy clouds gathered once again on the moor, thunder rolling round the hills following forked flashes of lightning. By 10am premature dusk came over the area. Rain, heavy and penetrating, began its relentless move down from the high moors. The River Teign running just below bank level, rose quickly. Smaller streams from the side valleys poured their brown waters into the main torrent. Mill owners watched anxiously as the levels rose. By 3pm all low lying fields were covered to a depth of 2-3 feet. Once small springs along the road sides now carried mud and stones out onto the road surfaces causing traffic stoppages. The school bus from Newton Abbot left at the usual time. At Chudleigh the river ran onto the road, however the driver drove through but, when he approached Doghole Bridge, near Hennock, the low area of road was covered by 6 feet of swirling torrent. A small brook rising in the hills above Hennock had been transformed into a wide river carrying tree branches and debris of many kinds. Intent on getting home the driver ordered the children off the bus, reversed into the nearest opening, turned and went. Some time later a message came through to Christow.

"Your children are somewhere on the road between Trusham Quarry and Doghole Bridge, the river is out, you will need a boat."

A father (Stafford Clark) of two of the children loaded his small boat on a truck and, picked up another man, Mr Langston, who also had children there. Together they set off. At the bridge it appeared worse than they had anticipated - 50 yards of deep water divided them from the children who were huddled together, trying to get shelter beneath the trees. The two men unloaded the boat and pushed it out. Rowing or steering was impossible so they jumped over the side into the water up to their armpits. On the river side of the road a tubular fence gave them the support they needed and, edging the boat slowly along, they at last touched the tarmac surface on the Trusham side. Six children scrambled in and were ferried to the Christow side where, by this time, other parents had arrived. Four times the little boat crossed the torrent. Now, with the help of other fathers, at last all were safe.

An almighty furore erupted at the treatment of the children and, at a speedily convened Parish Council meeting chaired by Mr Archer and attended by parents from Christow, Bridford, Doddiscombleigh and Ashton, the bus driver and Bus Company were castigated for neglect. A resolution sent to the Heads of the schools in Newton Abbot insisted that, in future, as soon as flooding was likely to occur, the buses were to be sent early to take the Teign Valley children home.

This incident highlighted the fact that, had it happened in darkness, many children might have perished trying to cross to safety. The Teign, a river which normally rises and falls quickly can, in some circumstances, become a killer.'

In heavy rainfall it's not just the river that can become a killer. The following month Exeter was under water and, amazingly, people were boating on Haldon Hill.

³ 'On Thursday 6th October 1960 an artificial lake 60 feet deep was formed due to water from a wide watershed, upon which had fallen torrential rain being held back by the high embankment built for the Exeter to Newton Abbot road to take a new course at Rushycombe Corner in 1959. A culvert under the road had become blocked by a landslide. By the time the lake was reported there was already a risk of the 67,000 ton embankment giving way to the 32,000 tons of water pressing on it, exerting a pressure of 1½ tons per square foot at the base. The water was rising at the rate of a foot an hour and within 12 hours would have flowed over the embankment had this not first collapsed.

Had the embankment given way, the lives of passengers in any vehicles then on the roadway would have been seriously endangered and the rush of water and earth would have wrought havoc down the valley.

It took 2 days for the water level to be pumped down to 2ft. To begin with progress had been slow with 8-10,000 gallons being pumped out each hour while 2,700 gallons continued to pour in each hour from the watershed. The level only fell by 6ins an hour at first before steadily increasing to 12ins and, finally, to 18ins. The rain continued to fall during the operation with 1½ ins being recorded.'

Storms

The most famous in living memory was the storm of 16th October 1987 where winds of 122mph hit the south of England causing havoc and destruction.

⁴ 'The storm cost a total of 18 lives and an estimated £1 billion in repairs and clear-up costs. Hundreds of people were injured. Around 15 million trees were lost and hundreds of thousands of homes were without power for more than 24 hours. By the time most people went to bed, exceptionally strong winds had not even been mentioned in national radio and TV weather broadcasts.

Michael Fish's famous line that there wouldn't be a hurricane was actually correct. He was referring to a tropical cyclone in the West Atlantic. Officially the gusts were locally hurricane force in strength but not sufficiently widespread.

According to the Met Office the last storm of similar magnitude in England occurred in 1703.'

In Christow 4 trees were brought down by the Post Office causing the road to be blocked and necessitating a temporary need for people to trespass over a private garden to get up to the village from Lower Town.

In January 1990 hurricane winds again caused trouble bringing down phone lines, power cables and laying flat conifers around the reservoirs, some roads through which were closed by fallen trees.

Drought

⁵In January 1901 the Parish Council recommended the boiling of all water due to supply being short during a severe drought. In the summer of 1921 the wells ran dry but the most famous drought of recent years was the summer of 1976 when standpipes were erected around the county (though only threatened in the valley) as the reservoirs became perilously empty. Water was rationed and people became practised at saving their bath water for the garden and filling a glass with water whilst cleaning teeth rather than leave the tap running. When asked what he did when the pasture land became a waste land, a local farmer simply replied that they re-seeded when the rain came.

It is interesting to note, however, that, overall, 1987 was actually a drier year than 1976 with only 30.70in recorded at the weather station in Ashton for '87 as opposed to 34.25 for '76 against an annual average rainfall of 43in.

Snow

The biggest challenge created by nature to concern the valley residents has to be the problems created by a harsh winter where snow and ice make it virtually impossible for anyone to get in or out of the valley. In March 1891 a blizzard caused many deaths, cutting off whole communities. In 1916 severe winter weather caused untold hardship on communities already struggling with the short rations occasioned by the Great War. 1947 was the most terrible winter but memories of this are fading. Many houses in Christow were without indoor plumbing and the outside privies froze regularly.⁶

The most famous of the bad winters which is still remembered by many was the winter of 1962-3. The snow started to fall on Boxing Day 1962 and some of it stayed in the corners of fields up towards Bridford as late as the following May. Farm tractors with bucket attachments were used as snowploughs and forced their way through the narrow lanes where the snow reached the top of the hedgerows. The postman, Ron Mutters, would walk through to the farms above Christow. It would take him all day to deliver the mail. The Devon General bus, manned by Moretonhampstead men who felt it their 'duty' to get people to work, would somehow makes its way through from Moretonhampstead to Exeter. They knew the locals who were their usual passengers and would wait whilst they fought their way through the snow to the main road where a single carriageway had been created along which the bus would travel. Normal life was resumed as much as possible but at a much slower pace and this continued for many weeks. ⁷

Writing this in January 2011, we appear to be about to enter the third successive year of snow and ice. A weather condition that we had begun to believe was a rarity is becoming more regular. The beginning of 2009 saw deep snowdrifts up above Beckhamstree; 2010 began and ended with heavy snowfalls and bitter temperatures. A daytime temperature of -4.5°C was recorded in Christow on Boxing Day 1962; -7.5°C registered on our outdoor thermometer first thing on Christmas Eve 2010 with the temperature remaining well below freezing all day.

What's to be done?

Trying to get information to progress this project has been like trying to walk through treacle. Above all else we English love to moan about the weather: it is always too wet, too cold, too dry - even too hot for some when we get a good summer! We don't, quite rightly, feel there's anything we can do about it whatever nature throws at us.

Although this is true there are things we can do to try to minimise the effect that extreme weather can have on our ability to live safely and securely in the Teign Valley during such periods.

Care in the Community

Since the introduction of the Community Care Act in 1990, the emphasis has been on ensuring that, wherever possible, those people within our community who cannot manage to care for themselves are kept within the community and not placed in an institution or care home unless there is no other option. Over the intervening years this has led to care agencies being established who come in up to 4 times a day to ensure that these vulnerable people are kept clean, fed and medicated where there is no family locally who can meet this role or to support the family carer so that he/she can maintain some quality of life for themselves around their caring responsibilities. The whole concept relies on the fact that people can come in from outside to perform the tasks required. What if they can't get through because of an extreme weather event?

⁸ During last winter's big chill a multi-agency emergency hotline helped to co-ordinate requests from people struggling to cope. The service helped them attend day centres across Devon and medical appointments. Emergency food supplies were brought in to people who were cut off and a volunteer force of 4x4 drivers ensured that district nurses and carers could get to the most vulnerable. This situation highlighted to many the vulnerability of their neighbours and the Dunkirk spirit was very much in evidence. If, however, we were to be snowed in to the extent that we were in 1963, I think we would have to develop a more sustainable method of ensuring that we are all kept safe and warm at home. Some local people, it is alleged, called Tesco in January 2010 to deliver their groceries because they couldn't get out. And Tesco could get in??

Iced In

These days we are so conditioned into making sure that we mind our own business, that we don't take responsibility for anything that we feel the council should take responsibility for or that we may get sued for if we do wrong that we allow hazards to develop over which we could take control. An example of this is the fact that we would rather look at a gully that has been filled by fallen leaves or debris brought down by heavy rainfall and complain about the flooding hazard that has subsequently been created than do anything about it. Once we would have recognised the trouble spots and made it our business to keep these clear. Now we expect the council workmen to have this local knowledge and keep the gullies clear. The fact that it causes flooding is, perhaps, a transitory event of short duration but when it is bitterly cold and the flood becomes several inches of dangerous ice, then that is another matter. Such an instance occurred at Coombe in Christow in January 2010. Roadmen had filled in the gully leading from Canonteign by the side of the lane resulting in a continual wet and icy patch being created at the T junction. This patch became much more in the snow. An afternoon of hard graft by two local residents cleared this problem. Devon County Council seems much more aware of these problems than they were and is actively encouraging communities to take a little bit of ownership of the need to monitor the very local conditions, clear snow and ice and look out for the vulnerable in their midst. The current edition of Devon Talk which is delivered to every household contains detailed guidance on these matters with links to the Council website for up to the minute information on travel information and how to contact Care Direct for vulnerable people needing extra help.

We are very fortunate in the Teign Valley in that the staff at our local GP surgery and the volunteers at Acorn Community Support are renowned for remembering the needs of the elderly and sick and do all they can to ensure that their needs are met, often with the help of local farmers. There are also many carers among the neighbours of the vulnerable. Many such people living in much bigger communities are not so well served.

When the deep snow and ice appeared in the run up to Christmas and the Council was caught unawares leading to a greater volume of clearance work than they could manage and the stores of road salt diminishing with frightening speed, local residents determined not to let their plans for Christmas be ruined and set about clearing the roads for themselves. Smithay Meadows and Church Lane are good examples of this excellent community effort.

Distance Learning

We have probably all seen our local school children hide near the hall in periods of snowy weather aiming to avoid the bus should it brave the journey up the valley to transport them to school. We all enjoy playing in fresh snow and find even a light fall the perfect excuse not to go to school or work. These halcyon days, however, may soon be coming to an end. Educational establishments are now developing the virtual learning environment. Teachers and pupils and students from schools and colleges across the county can log into their secure VLE site from their home computers and continue lessons from a distance.

Local facilities

Local shopkeepers must have very mixed emotions when the weather turns icy. People who never come into the shop suddenly become their best customers and their business booms only for those same people to disappear again as soon as Tesco can deliver again or they can resume their usual weekly shop at Sainsbury's. We are now so used to getting what we want on demand, not like in times gone by when country folk would really be in tune with the way weather patterns were developing and ensured that they were well stocked with essential supplies. Open fires would have been more commonplace whereas today many households are reliant on importing gas cylinders or heating oil to keep them warm. Changing our shopping habits and expectations can prove very difficult so supporting our local shops all the year to ensure their sustainability has to be worthy of consideration.

David Braine from the BBC says that you cannot predict the weather with any certainty very far in advance. The uncommonly dry year will, inevitably, be followed by the uncommonly wet year so that the 5 year average will be maintained. What we can be sure of is that we will have periods of drought, periods of storms, of ice and snow, of heavy rain. We can take steps to ensure that we can cope with whatever the weather brings whenever it brings it and there are many who believe that extreme weather conditions will become more frequent as the climate changes. All credit to the family whose new house near the Teign House Inn has been built with flood defences around it,

We need to make sure that we understand our local environment, the local hazard spots, those who are vulnerable within our midst and what role we can all play to ensure the safety of us all. You may argue that it is best to live by the philosophy of che serra (what will be, will be) because there is little we can do as individuals to alter the weather patterns but that does not mean that we should keep our heads in the sand and avoid ensuring that we are proactive in our approach to the consequences of extreme weather and each do our bit to minimise the effects that inaction can have in making a bad situation worse and more dangerous for all. Even a simple act like taking responsibility for telephoning the MyDevon Roads and Transport hotline on 0845 155 1004 to report an empty grit bin can help to make life easier and safer for all. The sheer fact that we choose to live within a small community means that we can share, when necessary, responsibility for each other's welfare and make sure that everyone is as safe as they can be. As Colin Fidock says in December's edition of Christow News, there are many good people in the valley who will come out and help clear the roads but we need more bins and, perhaps, a more co-ordinated approach to ensuring that these bins can

be kept topped up and that there are named people on stand-by to help when the next batch of bad weather arrives. As the recent freeze up amply demonstrated, the 'fun' element of snow and ice evaporates faster than the ice and if the residents of this valley were to be made prisoners of the weather for more than 4 days they would find it very difficult indeed.

Maggie Bonnell & Shane Edgar

January 2011

Notes

¹The Nuffield Farm Project was established in October 1959 to obtain accurate meteorological data from 11 weather stations set up over an area covering Kennick and Laployd up to Crediton and across to Exeter. The stations were run by local farmers on whose land they were and regular recordings were obtained from 9 of them during the duration of the project. Information supplied by Rosemary Horsman.

²Stafford Clark – 'Backs to the Fence'

³Devon Flood Story – 1960

⁴ BBC on line

⁵ Stafford Clark's 'As We Were'

⁶Mains water supplies were not installed in Christow until 1949, mains sewers not until 1953

⁷ From recollections of Mike Howard (Dunsford) and Mike Watts (Christow)

⁸ Devon Talk – Spring 2010