



Advisory Visit
River Dove, Beresford Dale
May 2015



Pike Pool, Beresford Dale

1.0 Introduction

This report is the output of a site visit undertaken by Tim Jacklin of the Wild Trout Trust to the Beresford Dale Fishery on the River Dove, Derbyshire/Staffordshire on 20th May, 2015, on behalf of the owner, Zachary Levenick. Comments in this report are based on observations on the day of the site visit and discussions with Stephen Moores, river keeper.

Normal convention is applied throughout the report with respect to bank identification, i.e. the banks are designated left hand bank (LHB) or right hand bank (RHB) whilst looking downstream.

2.0 Catchment / Fishery Overview

2.1 Location and Landscape

The River Dove is a major tributary of the River Trent, rising on Axe Edge Moor near Buxton in the Peak District and flowing south and east for approximately 70km to join the River Trent at Newton Solney near Burton upon Trent. For much of its course, it forms the boundary between the counties of Derbyshire and Staffordshire. Beresford Dale Fishery is located on the upper river close to the village of Hartington and extends for approximately 5km between Hartington Bridge on the B5054, Mill Lane (National Grid Reference SK1207559835) downstream to Biggin Dale (SK1416556965).

The upper River Dove is the boundary between two distinct landscapes, the South West Peak to the west and the White Peak to the east. The former is an upland area characterised by a geology of Millstone Grit and Coal Measures, acidic soils, moorland vegetation, high rainfall levels and surface run-off (rain-fed rivers). In contrast, the White Peak consists of an outcrop of Carboniferous limestone forming a gently rolling plateau dissected by steep-sided dales and spectacular Karst scenery; land use is predominantly productive permanent pasture and river flows are moderated by groundwater from the permeable limestone geology. Beresford Dale marks the point where the Dove crosses from being the boundary between these two landscapes to enter the White Peak entirely, flowing onwards through the successive limestone dales of Wolfscote Dale, Milldale and Dove Dale.

2.2 Designations and legislation

The Beresford Fishery falls within a number of statutory conservation designations including national SSSIs (Sites of Special Scientific Interest), namely Hamps and Manifold Valleys SSSI and Dove Valley and Biggin Dale SSSI. Along with other SSSI sites, these are encompassed in the geographically broader Peak District Dales Special Area of Conservation (SAC), a European designation affording increased levels of protection (<http://publications.naturalengland.org.uk/publication/6024205996916736>). The features of interest covered by these designations are wide ranging and largely terrestrial, but aquatic species of interest include brook lamprey *Lampetra planeri*, Bullhead *Cottus gobio*, and white-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*. Natural England is the government agency responsible for SSSIs and SACs in England.

The Water Framework Directive is European legislation requiring member states of the EU to bring rivers and lakes into "good ecological status". Rivers are divided into management units called waterbodies and Beresford Dale falls within waterbody ID GB104028057780 (Dove from Source to River Manifold). Waterbodies are assessed for a range of ecological and chemical parameters and if just one of these is below "good" status, the overall status of the waterbody cannot be classified as good. Under the current cycle (2013), the above waterbody is "moderate" status, the reason being a moderate classification for fish, all other parameters being "good" or "high". The Environment Agency is the government agency responsible for Water Framework Directive implementation in England.

Beresford Dale is located within the Peak District National Park and the Peak District National Park Authority has an interest in biodiversity via its Biodiversity Action Plan www.peakdistrict.gov.uk/looking-after/biodiversity.

2.3 History

The Beresford Fishery is well known because of its historic associations with Charles Cotton (1630 -1687) who wrote an addendum to the later editions of Izaak Walton's *Compleat Angler*. Cotton lived in Beresford Hall and fished on the River Dove, his experiences informing his writing of *Being Instructions How to angle for a Trout and Grayling in a Clear Stream*. The fishing house which stands alongside the river has the entwined initials of Walton and Cotton above the door.

Arguably, the historic associations of the Dove with Cotton and Walton have contributed to the extensive modification of the river for angling purposes over the intervening centuries, with the installation of numerous weirs and bank reinforcement throughout the limestone dales. The recent report by Trent Rivers Trust on behalf of Natural England, *River Dove Restoration Plan – Letting the Dove Flow*, provides a comprehensive overview of the issues and the potential for restoration of natural river processes.

Writing in 1905, Walter Gallichan described the section of the Dove from Hartington road downstream into Narrow Dale (Wolfscote Dale) as being strictly preserved and abounding with trout and grayling. He noted the water had been repeatedly stocked “with rainbow and other kinds of trout” and describes one owner, Sir Thomas Wardle, as having a stock pool where he bred rainbow, Loch Leven, fontinalis (presumably brook charr *Salvelinus fontinalis*) and native brown trout. The average weight of trout is recorded as 9 to 10 ounces, and the grayling rather more. Unlike the nearby River Wye (Buxton – Bakewell area) where a feral population of rainbow trout became established, non-native trout species did not establish in the River Dove.

In the late 1990s and early 2000s the upper Dove, including the Beresford Fishery, suffered from pollution caused by cypermethrin (sheep dip pesticide) and nutrient enrichment from the effluent from Hartington creamery. The sheep dip pollution had serious detrimental impacts upon the invertebrate life within the river and was first detected by anglers noting the absence of the annual hatch of Mayfly (*Ephemera danica*). A new type of sheep dip had recently been introduced (based on synthetic pyrethroid active ingredients) which was far more toxic to aquatic life than previous (organophosphate based) products. Even tiny amounts of the new chemical reaching watercourses caused serious impacts to invertebrate life and after a spate of such incidents nationally, and a campaign by angling and conservation organisations, the sale of synthetic pyrethroid dips was suspended until the manufacturers could prove they were safe for use. Mayfly were subsequently re-introduced to the upper Dove by the author (with advice from Dr Cyril Bennett), using eggs from flies captured on Dove tributaries. Dr. Nick Everall has monitored invertebrate populations and studied Mayfly phenology in this reach of the Dove since this time.

During the same period of time, increased production at the Hartington creamery had resulted in a deterioration in the quality of effluent being discharged to the river, organic pollution and nutrient enrichment being the main concerns. Extensive investigation and policing by the Environment Agency into this issue resulted in a tightening of effluent quality standards and substantial investment in waste water treatment by the company involved. Water quality and invertebrate life recovered following this (and the banning of SP sheep dips) and Overall (2007) provides a comprehensive review of the recovering situation. Since this time, the creamery has been closed and no longer discharges effluent to the river. Nutrient enrichment continues to be a concern on the River Dove (in common with many other rivers), not least because of its impact upon features within the designated conservation areas mentioned above. Both point sources (such as sewage treatment works) and diffuse sources (from land use practices) contribute to elevated levels of phosphate (<http://publications.naturalengland.org.uk/publication/5770014627987456?category=440349>)

3.0 Habitat Assessment

The descriptions below broadly follow the progress of the walkover in an upstream direction starting at the downstream limit near Biggin Dale.

3.1 Biggin Dale to Wolfscote Dale

The downstream extent of the visit was where Biggin Dale meets the River Dove (SK1416556965). From this point to the footbridge (SK1307058405) at the head of Wolfscote Dale, the river flows through a narrow, steep-sided, limestone dale. The left bank is owned by the National Trust and the right bank by private individuals. Land use is livestock grazing (sheep) and there is a public footpath running along the left bank (Photo 1).

There are a number of weirs throughout this reach, originally constructed to enhance the fishery by impounding water, in an attempt to create areas of greater depth for holding larger fish (Photo 1). Some of the structures are centuries old whereas others are more recent. With the advent of recent conservation designations there has been considerable debate about the relative merits of the weirs and their effect upon natural river processes.

Weirs impound flows producing a slower-flowing, deeper, ponded effect upstream. Sediments tend to settle out in this area over time, re-grading the river bed and reducing the depth of the pool, negating the original intended purpose of the weir to provide deeper water. The interruption of natural sediment transport processes can also reduce trout spawning opportunities by trapping gravels in slow-flowing, poor spawning habitat upstream of a weir and limiting their downstream supply and re-working by the river.

There is also a tendency for bank erosion at the edges of the weir on the downstream side where turbulent back eddies occur; this eventually leads to a breach in the weir, or where it is repaired, the gradual widening and shallowing of the river channel. Often banks are reinforced with stone between weirs to prevent this, limiting the opportunity for natural river processes such as erosion, deposition and meandering to create self-sustaining habitat features (such as lateral scour pools and riffles, Photo 2).

The removal of weirs raises conflicting issues of ecological benefit, historic and archaeological interest, and angling benefits but there is no doubt that there is considerable scope and support for the removal of a number of weirs throughout the limestone dales of the Dove. A pilot project to do this would provide the opportunity to monitor the effects and inform future management decisions. The fluvial audit of the upper Dove catchment carried out by Loughborough University (Rice and Toone, 2011) provides an analysis of the effects of these weirs and recommendations for future management.

There were one or two examples of large woody debris (LWD) in the river channel (Photo 3), but generally it is lacking. LWD has numerous benefits for river habitat, including localised scour, depth variation, sediment sorting, refuge for fish and invertebrate habitat. Naturally occurring LWD should be retained within the river wherever possible and the urge to tidy resisted. It would be possible to introduce stable LWD structures here, as carried out by WTT in partnership with the National Trust and Leek & District Fly Fishing Association in Dovedale, a short distance downstream. Combining this with removal of weirs and targeted stone bank reinforcement would make sense.

Sheep grazing occurs on both banks throughout this section and livestock have free access right up to the river edge. Because of this, the riparian vegetation is limited to closely cropped grass and mature trees (mostly

alders) with no taller vegetation or tree succession. The close-cropped grass has a shallow root structure which means the bank is prone to accelerated rates of erosion; this can be seen in Photo 4, where tree root structures are exposed and the bank “scaloped” in between. Eventually such trees are lost and in the absence of any succession, bank stability is reduced and erosion further accelerated. The absence of taller vegetation, bushes and young trees limits low cover over the river margins, greatly reducing trout holding potential and reduces the habitat value of the banks for the winged stages of aquatic insects and other invertebrates. Tree shading is also important in regulating river temperatures (www.luten.org.uk). Reducing livestock densities or fencing out sheep from sections of the river would benefit riparian habitat and opportunities for this should be discussed with the relevant land managers and agreed with Natural England (in the context of features of interest within the SSSI/SAC).

There are numerous scree slopes along the sides of the valley in this section which form a source of coarse sediment supply to the river (important for trout spawning). Many of these are cut-off from the river by the footpath along the left bank and stone bank reinforcement (on both banks), reducing the rate of supply (Photos 5, 6). It would be desirable to re-connect this supply to the river if a way could be found. Simply moving the gravel into the river is unlikely to be possible as it would disturb the angle of repose of the scree slopes. However, changes to the river such as removal of stone bank protection on the right bank could re-connect some scree slopes to the river without compromising access/recreation. This issue and the others above are identified in the recent report by Trent Rivers Trust on behalf of Natural England *River Dove Restoration Plan – Letting the Dove Flow*. This provides a useful starting point for engaging with Natural England and other interested parties to put some of the recommendations into action.



Photo 1 Typical weir and bank reinforcement in Wolfscote Dale. Note the lack of lateral movement of the river channel, steep valley sides and footpath.



Photo 2 Some natural sinuosity does occur in this reach, creating more variety in depth and flow. This effect could be promoted in other areas by removal of stone bank protection and weirs. The effect of overgrazing and impoverished riparian vegetation also needs to be considered.



Photo 3 Large woody debris is scarce within this reach. Naturally occurring LWD should be retained and its deliberate introduction be considered.



Photo 4 Grazing pressure leads to exposure of tree roots and scalloping of the bank, accelerating tree loss with little prospect of replacement in the absence of tree succession.



Photo 5 Scree slopes provide a source of coarse sediment to the river (something relatively lacking in the upper Dove), but the left bank footpath interrupts this supply and the multiple weirs restrict its transport and natural deposition pattern.



Photo 6 Right bank scree slopes have more potential for connection to the river without affecting the footpath.

3.2 Footbridge (SK1307058405) to Fishing House (SK1271259217)

Immediately upstream of the footbridge, a Scots pine tree has fallen into the river, retaining some root-hold on the left bank. The branches holding the trunk off the river bed could be carefully cut away to lower the tree into the river and provide some stable large woody debris, a nice habitat feature and a quick win.

From the footbridge upstream to the end of Beresford Lane (SK1282458624), the valley opens out and the gradient lessens, the river becoming a slow-flowing glide. The downstream extent is impounded by a low weir and this should be removed to give the section more energy. The field on the left bank is unfenced and grazed, whilst the right bank is fenced although it appears some grazing is taking place on the river side of the fence (probably by sheep). The grazing is affecting riparian vegetation and habitat in the same way as described in the previous section and contributing to the over-wide nature of the channel, reducing fish holding potential. Excluding livestock from a wide buffer strip would improve river habitat along this section (Photo 7).

Alder trees are present along the banks, but younger trees are struggling to establish because of grazing pressure. The right bank appears to be better in this respect and there are a number of younger trees (or possibly coppice re-growth) that would be suitable for partially cutting and laying into the margins of the river to improve low cover over the water (Photo 8). As willow is often the first species lost (due to its palatability to sheep), it may be worth trying to reinstate some species diversity amongst the trees by planting willow whips in this area and any areas where cover is lacking and sheep browsing might not be an issue (particularly alongside the footpath, e.g. in areas around Photos 9 - 13).

Upstream of Beresford Lane, a number of former weirs have been removed, improving the in-stream habitat by increasing flow velocities, remobilising coarse sediment and creating areas where trout have been observed spawning subsequently (Photo 9). Some of the limestone blocks from the former weirs were crushed and the gravel introduced to the river. The river enters the steep-sided, limestone valley of Beresford Dale here and the public footpath swops to the right bank. The valley bottom is narrow and path is perched on the top of stone bank reinforcement, limiting the scope for its removal. Two weirs (Photo 10) have been notched but otherwise left

intact downstream of Pike Pool, a pool with a distinctive limestone column mentioned in Cotton's writings (cover photo). Ideally these weirs should also be removed, but due consideration needs to be given to the permissions and consultation required.

Above Pike Pool, the public footpath crosses to the left bank. The walkover survey continued along the right bank upstream towards the fishing house. The river here has historically been extensively modified for angling. The channel is uniformly over-wide and has near vertical, stone-reinforced banks. A number of weirs formerly impounded water through this section, but were breached at around the same time as those below Pike Pool (circa 2012, Photos 11, 12). The mobilisation of bed sediment here appears less extensive than where the weirs have been removed downstream; also, the channel narrowing that might be expected has not occurred. Some impounding effect from the remains of the weirs is still occurring and it is recommended that the remainder of the structures are removed.

Ideally the stone bank revetment should be removed to allow a more natural regime of erosion and deposition to occur, creating lateral scour pools and depositional side bars. This may not be possible within the narrow confines of the valley here where footpaths could be undermined, but there are some wider areas where it could be trialled. Some limited introduction of woody debris has been carried out by hinging bankside trees (Photo 13) and this should be extended and include larger tree kickers (see recommendations) to help trap sediment and encourage variation in channel width.

Close to the fishing house the channel is wide and slow-flowing, most probably as a result of the lesser gradient here rather than downstream impoundment. The weirs immediately below this section have been largely removed and although they could be lowered a little more, it is unlikely to alter the nature of the reach past the fishing house.

The left bank in the vicinity of the fishing house has dense stands of snowberry *Symphoricarpos rivularis* and dogwood *Cornus sanguinea* (Photos 14, 15). These provide low cover over the water, which is desirable for holding trout, but the extent and density of these plants is excessive and they are shading out other plant species and reducing diversity. Cutting back the snowberry and dogwood is recommended, followed by herbicide stump treatment (with appropriate permission). This would allow a more natural variety of vegetation to be established, including willows, alder,

blackthorn and hawthorn. These areas fall into unit numbers 001 (Beresford East) and 002 (Beresford West) of the Hamps & Manifold Valleys SSSI, both of which are listed as being in favourable condition; however the last assessment of these units took place in 2007. The relevant officer at Natural England should be consulted over how better management of the riparian vegetation here could be dovetailed with maintaining the favourable status of the SSSI units

(<https://designatedsites.naturalengland.org.uk/SiteUnitList.aspx?SiteCode=s1002911>).



Photo 7 Grazing in the meadows downstream of Beresford Lane restricts the quality of riparian habitat and the fish holding potential. Fencing, planting willow whips (sallows) and tree regeneration would improve this section.



Photo 8 Hinging and laying alder stems into the river margins would increase trout holding potential here.



Photo 9 Where former weir structures have been removed, the in-stream habitat has improved greatly. Increasing low cover in these sections should be a priority.



Photo 10 Two weirs immediately downstream of Pike Pool which have been notched but are otherwise intact.



Photo 11 Upstream of Pike Pool, breached weir which could be dismantled further.



Photo 12 As above



Photo 13 Reach above the two weirs in photos 11 and 12. Uniform and wide with stone reinforced banks. The hinged tree is a good start but stone revetment removal and more substantial woody structures are required to trap sediment and create depth and flow variety.



Photo 14 Dense stands of dogwood on the left bank near the fishing house.



Photo 15 Snowberry bushes along the right bank near the fishing house.

3.3 Fishing House (SK1271259217) to Hartington Bridge (SK1207559835)

Upstream of the fishing house the character of the river changes. The channel is low gradient and meanders through open meadows grazed by cattle on both banks. The river is predominantly slow-flowing glide habitat, with fine sediment dominating the bed substrate (Photo 16). In recent years three low weirs were removed from this section which has improved the variation in flow patterns and substrate.

The river banks are relatively steep-sided suggesting that this section may in the past have been dredged to lower the river bed (for land drainage). Along with the former mill weir immediately above this section (Photo 19), which interrupts natural sediment transport processes, this could account for the lack of coarser sediments found in this reach. Rice and Toone (2011) showed that the upper Dove has a relatively fine, mobile bed load derived from the weathering and erosion of silt/mudstones and that weirs interrupt the natural sediment transport process; the mill weir mentioned above is described as a significant barrier to the downstream transport of coarser sediment.

Some areas of gravel have been introduced recently (following the weir removals) and these appear to have successfully created some riffle habitat which is otherwise lacking here (Photos 17, 18). Both trout and grayling have been reported spawning on the introduced gravels. Great care needs to be taken when introducing gravels in this way, particularly in such a relatively low gradient reach, to avoid impounding water upstream and causing fine sediments to settle out (in the manner of the former low weirs). It is recommended that a fluvial geomorphologist is consulted to assess this reach in more detail, building upon the broader scale information in the fluvial audit (Rice & Toone, 2011) and providing recommendations for mitigating the lack of coarser bed sediments in this reach.

The right bank and sections of the left bank are not fenced along this reach so the bank is grazed up to the river edge. The marginal vegetation is not as heavily impacted as in the Dales downstream, because of the steeper banks here and cattle rather than sheep being the grazers. There is however a noticeable difference in the quality of riparian habitat between grazed and ungrazed areas in terms of the amount of low cover and tree succession. In areas where banks are lower gradient and cattle do have

access to the river, poaching of the banks creates a fine sediment input to the river (as seen in Photo 16). In the absence of sheep grazing, planting willow whips along the river margin, out of reach of cattle, may again be beneficial in reinstating species diversity, creating low cover and provide material for future hinging into the channel.

Above the upstream boundary, upstream of Hartington Bridge, the former mill weir was inspected (Photo 19). As noted above, this interrupts sediment transport and is also a significant barrier to the free movement of fish. Adult trout and grayling will move several kilometres to spawn and their offspring will subsequently spread through the river system colonising available habitat. Barriers to this movement reduce the viability and resilience of fish populations to environmental and anthropogenic impacts (such as drought, floods and pollution). The river channel here appears to have been re-routed to a higher point on the valley side when the mill was constructed (to gain head loss for milling), leaving the original river channel abandoned at the lowest point in the valley floor on the present right bank.

It would be possible to restore the river to its approximate original channel, circumventing the weir, restoring sediment transport and fish passage and reducing flood risk to the mill property (a private residence). Some flow could be retained in the existing channel to preserve the character and heritage of the mill. Such a project would require careful planning and the consent of all parties affected, but it would be worth exploring the idea.



Photo 16 Unrestricted grazing access restricts the quality of the riparian habitat and tree succession.



Photo 17 Retained LWD and introduced gravels have created some habitat variety in this reach.



Photo 18 Riffle habitat created with introduced gravels.



Photo 19 Weir at former mill property, upstream of Hartington Bridge.

4.0 Recommendations

- Plan a project to remove weirs and stone bank protection from sections of the river within Wolfscote Dale. Include the introduction of large woody debris (e.g. tree kickers)(Photos 20 - 22). This would require consultation with and agreement from the National Trust and other landowners; Natural England in relation to the conservation designations and possibly Peak District National Park Authority in relation to planning. Technical input from a fluvial geomorphologist would be required to design a scheme which balances restoration of natural river processes with impact upon recreational access (footpath). Engagement with Trent Rivers Trust would be beneficial.
- Exclude grazing livestock from the river margins wherever possible to encourage a healthier riparian habitat and the natural regeneration of trees. Specific areas which would benefit include throughout Wolfscote Dale, the meadows downstream of Beresford Lane and between the fishing house and Hartington Bridge.
- Continue to increase low cover over the water by cutting and laying suitable trees into the margins of the river. Plant willow whips in the river margin along the water line and out of livestock reach.
- Between Pike Pool and the fishing house: remove the remains of weirs that have already been breached. Plan a project in this reach to remove stone bank revetment and introduce large woody debris, and to replace the stands of snowberry and dogwood with a more natural balance of vegetation. Consultation with landowners and Natural England is required.
- Upstream of the fishing house: consult a fluvial geomorphologist on mitigating the lack of coarse sediment in this reach, with a view to creating more riffle habitat.
- Explore the opportunity for removing the barrier to fish passage and sediment transport presented by the mill weir upstream of Hartington Bridge.

The Dove at Beresford Dale is designated non-main river for flood risk management purposes and as such, any works to the river that might obstruct or alter the flow require Land Drainage Consent from the Lead

Local Flood Authority (in this case Derbyshire County Council: www.derbyshire.gov.uk/environment/flooding/ordinary_watercourse_consents/default.asp).

Because of the location of Beresford Dale within the Peak District National Park and the SSSI and SAC designations, both the Peak District National Park Authority and Natural England must be consulted about works to the river which could affect the features of interest of the sites or other protected species and habitats.



Photo 20 Site of removal of a low weir in Dovedale.



Photo 21 Gravel mobilised and sorted upstream of the above weir removal. Trout spawned in this area subsequently.



Photo 22 Installing a tree kicker in Dovedale (a cut tree cabled to its stump).

5.0 Making it Happen

The key to implementing the recommendations is building a consensus between the various parties with an interest in this section of the river, including landowners and statutory bodies. Broad strategies, aims and aspirations for re-naturalising the river already exist; creating a detailed design for specific, reach-based projects to realise these aims should be the next step. This would then form the basis for seeking permissions, consents and funding to carry out the works. The Wild Trout Trust could assist with developing a project proposal, although technical input from a fluvial geomorphologist for some aspects would be required, which would require additional funding.

6.0 Acknowledgement

The WTT would like to thank the Environment Agency for supporting the advisory and practical visit programme in England, through a partnership funded using rod licence income.

7.0 Disclaimer

This report is produced for guidance and not for specific advice; no liability or responsibility for any loss or damage can be accepted by the Wild Trout Trust as a result of any other person, company or organisation acting, or refraining from acting, upon guidance made in this report. Accordingly, no liability or responsibility for any loss or damage can be accepted by the Wild Trout Trust as a result of any other person, company or organisation acting, or refraining from acting, upon comments made in this report.

8.0 Bibliography

Everall, N. (2007), A review of water quality and invertebrate data for the Beresford fishery, River Dove, for Mr Michael Collins.

Rice S.P. And Toone J.A. (2011). Fluvial audit of the Upper Dove Catchment. Loughborough University

Gallichan, Walter *Fishing in Derbyshire and Around*, F.E. Robinson & Co., London, 1905

Trent Rivers Trust, *River Dove Draft Restoration Plan – Letting the Dove Flow* http://www.trentriverstrust.org/site/letting_the_dove_flow

Walton, Izaak *The Compleat Angler*, various editions from 1653 onwards

Wild Trout Trust has produced a 70 minute DVD called 'Rivers: Working for Wild Trout' which graphically illustrates the challenges of managing river habitat for wild trout, with examples of good and poor habitat and practical demonstrations of habitat improvement. Additional sections of film cover key topics in greater depth, such as woody debris, enhancing fish stocks and managing invasive species.

The DVD is available to buy for £10.00 from our website shop <http://www.wildtrout.org/product/rivers-working-wild-trout-dvd-0> or by calling the WTT office on 02392 570985.

The WTT website library has a wide range of materials in video and PDF format on habitat management and improvement: <http://www.wildtrout.org/content/index>