The Ledown

1. An aerial view of the AVR shows structure, groundcover, and texture, with summertime color provided by the varying greens. On the left is the *Lonicera nitida* 'Baggesen's Gold' tunnel. In front of this is *Pittosporum tenuifolium* 'Pom Pom', and next to it *Juniperus communis* 'Compressa'. Moving around to the right is a shaped specimen of *Buxus sempervirens* 'Variegatus'. A green "lawn" is created by the spreading form of *Paronychia kapela* in front of the school. Behind this building, *Juniperus communis* 'Gold Cone' is beginning to tower.

Other shrubs in the background include *Berberis stenophylla* 'Corallina Compacta' and *Taxus standishii*. On the right of the photograph is *Hebe cupressoides* 'Boughton Dome' next to *Prunus incise* 'Kojo no mai'. The engine is *Charles*, a Penrhyn large Hunslet 0-4-0ST, on a short passenger train approaching Hinton Magnolia Station. This locomotive is gas-fired and was built by Keith Bucklitch. The hamlet of Hinton Magnolia can be seen in the center of the line.



Valley Railway

THE AMBLEDOWN VALLEY RAILWAY is the third-prize winner in our Small Garden Railway Contest. It is a beautiful, well established, thoughtfully conceived narrow-gauge line in a classic English garden. The line is simple in plan and a great deal attention has been paid to scale-appropriate plantings and getting a good balance between railway, plantings, and structures. Find our first-place winner in the June 2011 issue and the second-place winner in the August 2011 issue.—*Editor* An English narrowgauge backwater

by David and Becky Pinniger Cookham, England | Photos by David Pinniger

The Ambledown Valley Railway recreates the atmosphere of an English narrow-gauge line ambling through the countryside in the mid 20th Century. Most traffic is country produce, including cattle for market, and there is a thriving passenger service in the days before road vehicles took their toll.

The AVR has never followed a single prototype, such as the Lynton & Barnstaple Railway, but collected two-foot-gauge items from all over the country to form an eclectic mixture of locomotives and rolling stock. Most locomotives and vehicles are built to a loading gauge similar to that of the L&B, so do not look mismatched when marshalled together.

So that we can happily run the much smaller two-foot-gauge locomotives, such as a quarry Hunslet or a De Winton, the AVR has a subsidiary called the Sedimentary Sand & Gravel Company. The SS&G has running rights over the AVR mainline but mixing of rolling stock is against the rules. If the AVR is bucolic, then the SS&G is definitely seedy and on its last legs, which provides an excuse for running some small, disreputable wagons.

Our railway turned 30 years old last year. When we look back at pictures of those early days, the AVR of today seems quite unrecognizable. Our philosophy has been "evolution," not "revolution," and we have learned a lot over the years about track laying and planting. We hope that the photos that accompany this article will give readers a taste of this.

Starting the railway

In 1979 we moved into a semi-detached house in Berkshire that had a small back garden of about 20' x 60'. I (David)



LLUSTRATION BY MARC HOROVITZ

Railway at a glance

Name: Ambledown Valley Railway Size of railroad: 35' x 15' Scale: 16mm/ft Gauge: 32mm Era: Mid 20th century Theme: English narrow gauge Age: 30 years Motive power: Steam Length of mainline: 60' Maximum gradient: 1-in-60 or 1.7% Type of track: Handmade-metal chairs and wood sleepers Minimum radius: 6' Structures: Wood and ceramic Control system: Hand of God

already had two 16mm scale live-steam locomotives that I would take to run on other tracks, including the legendary Alderbrook Valley Railway of my good friend Dave Rowlands.

Plastic, ready-made track was just starting to become available then. I wanted a more narrow-gauge look, which meant buying wooden sleepers (ties), castmetal chairs, and brass rail from a company called Bonds. We had decided that we wanted a ground-level railway that could be part of the garden, rather than a railway on high posts around the garden. The track was pinned to 18" lengths of treated 4" x 1" timber, which was creosoted, then screwed to short 2" x 2" uprights hammered directly into the ground.

Initially the track was a simple oval with two sidings. It was easy and quick to build, and the track-support construction was hidden from view by grass embankments or rock walls. The minimum radius was 6', following some of the best advice I was ever given when building a railway for steam engines: "Keep it simple, keep gradients to the minimum, and use the maximum radius you have room for."

Over the next few years, I built more track from second-hand or Bonds components and we added a wye leading to the main station at Bishops Amble. This area was slightly lower than the mainline, so the station area was built up on planks supported by a wood frame salvaged from the house extension, with the front disguised with stone blocks. The station had an engine shed, a run-around loop, and a turntable with spurs to a steaming bay.

The triangular junction from the station provided a flexible system, so steam trains could be operated out-and-back or



2. Fairford, a Lynton & Barnstaple Manning Wardle 2-6-2T on the embankment and bridge between Hinton Magnolia tunnel and Higher Buxton. On the left of the line is Juniperus communis 'Compressa'. Near it grow the red, fleshy leaves of a Sempervivum sp. Opposite, on the other side of the line, the bronze winter color of Cryptomeria japonica 'Lobii Nana' is still evident. Purple aubretia hugs close to the line beneath it. Behind the cryptomeria is Chamaecyparis obtusa 'Nana gracilis', and behind that is a specimen Lonicera nitida 'Bagessens's Gold'. Just behind the engine can be seen a specimen "tree" of Buxus sempervirens. The Erica carnea 'Myretown Ruby' is still flowering close to the line.

sent around the line for a few circuits. We could also operate short workings from Bishops Amble to a siding at Woody End. After a few years, we found the track got quite congested when we had visiting engines and trains, so the siding at Woody End was lifted to make way for the passing loop at Higher Buxton.

Various bridges were tried, the more flimsy wooden ones suffering the fate of natural selection, but the all-metal Meccano ones are still there, quietly rusting. I also tried ballast, but the loose variety was soon discarded, as it got stuck in the check rails and caused derailments. I prefer a method devised by Dave Rowlands, based on peat and cement. This "Rowlands mixture" encourages a good growth of moss in the Thames Valley, which is a big advantage if you want a bucolic, rural branch line. However, it does have a down



3. Quiet time at Bishops Amble. *Velinheli*, a small quarry 0-4-0ST Hunslet by TME has just arrived on a Sedimentary Sand & Gravel Co. works train.



4. *Siliguri*, a Darjeeling C class Pacific, is the largest engine on the line. It is coal fired and was built by Mike Gaskin.

side, as it traps moisture and accelerates the rotting of the wood sleepers. Careful application of creosote to the sleepers helped to delay this but, after 15 years, I found that some of the sleepers were completely rotted in the center and the rails were only held in place by the bit under the chairs set in the peat cement.

It was then that we discovered that most of the track-support planks had also rotted and I made a decision to relay all the track on brick pavers set in sand and cement. A few years ago, a visiting friend sat on the wall near the turntable and the whole area gave way, as the wood underneath had rotted. Since the turntable had caused a few problems, it was replaced by a three-way switch and the main station spur was extended.

Locomotives

Early engines on the AVR were built by Archangel Models. All were alcohol-fired and had either Smithies or pot boilers. Most of them, including *Foxdale*—built from a Lindale "Caledonia" kit—are still going strong after 30 years.

Many recent converts to narrow-gauge steam who have only seen and heard gasfired engines are surprised, when they visit



5. The battery-powered Tralee and Dingle railcar is used when the passenger traffic is very light. The model was made by Peter Dobson and can run on either 32mm or 45mm gauge. Moss looks comfortably at home in the roadbed.

our line, to see a simple pot-boilered engine ambling around with no attention and no noise, apart from the clank of the big end and the rattle of the wheels. Radio control is not needed on the AVR, as the railway is not steeply graded or curved and I prefer to see trains traveling through the country rather than spend hours switching. However, we do have a railcar and a few battery-powered diesels, which are useful for switching and the odd run on the mainline.

The first gas-fired engine (owned by the Sedimentary Sand and Gravel Company) was a Tony Sant Hunslet, *Louisa II*,



6. Bishops Amble station with *Dolgoch*, a gas-fired Talyllyn Railway 0-4-0T built by Finescale Engineering, about to leave. The scratchbuilt Glyn Valley coaches were made in 1976 and are still in service. The privet hedge, as background, both contains the garden and extends the "edge of the forest" feeling.



7. Quicksilver, a coal-fired Darjeeling B-class built by Hugh Saunders, passes the junction where the line joins from Bishops Amble. The station can be seen in the background through the trees.

bought in 1989. Another engine that arrived in 1989 was *Quicksilver*, a coalfired Darjeeling B class 0-4-0ST built by Hugh Saunders. This locomotive completely changed my outlook on coal firing.

Over the years a number of engines have come and gone. I still cannot resist steam engines and now have quite a large collection. These range from a small De Winton to a Darjeeling C class Pacific.

Rolling stock

Although I love steam engines and their operation, I do like to run trains rather than just engines. I have accumulated a correspondingly eclectic mixture of rolling stock. Some of the early vehicles, built in 1976 for Dave Rowland's original AVR are still in service, a testimony to simple card, ply, and stripwood construction. Most of them look a little spartan compared to some of today's super-detailed offerings but once they are marshalled in train and trundling around the garden, few people notice the absence of brake gear and other details.

Buildings

It is a tricky thing to get the right balance of track and buildings in the miniature landscape. The AVR has tried a number of different building methods, most of the early structures being made from stripwood or marine plywood. I hate taking buildings in and out whenever I have a steam up, so most of these original buildings gradually decayed and dropped apart. Fortunately, years ago I discovered a talented building maker called Stuart Currie. He makes distinctive limestoneblock buildings from ceramic. Because the buildings are fired at a high temperature, they are frost-proof in our winter climate, so they can be left outside and the railway never loses its character.

We have added a new building to the AVR each year and they range from a small platelayers hut to the Bishops Amble main station building to St. Holman's, a lovely village school. Geology is important. The buildings really set the railway in a limestone area of England such as the Cotswolds. Slate buildings would look out of place on our line.

Little people

The AVR has its own population, who can been seen waiting for trains, standing on the footplate of locomotives, or simply loafing. Nearly all are hand made from baked modeling clay and include some made by Becky. We are fortunate to also have some wonderful figures made by the talented Maureen Watkins, who, sadly, is no longer with us.

Carrying on the tradition is the creative Rob "Busybodies" Bennett. If you



8. A good fire in *Quicksilver* shows the engine is ready for the road.



9. Dolgoch approaching Hinton Magnolia. Beyond the Pittosporum tenuifolium 'Pompom' on the right, miniature daffodils nod over the tracks. Beside the depot, the tiny sedum crops up between gravel stones.

About the authors

David Pinniger is an entomologist who specializes in insect pests in museums and historic houses. He is a lifetime steam enthusiast with a particular passion for small scale, narrow-gauge steam engines.

Becky Pinniger works as a teacher/horticultural therapist with young people who have special needs.

The Pinnigers live in the Thames-side village of Cookham, in Berkshire.



David and Becky Pinniger at Bishops Amble.



10. The winter Darjeeling special, with modified A-class O-4-OST *Arvi* heading back to Bishops Amble across Binns Road bridge, made from Meccano parts.

look closely at the lineside, you may catch a glimpse of some well-known figures in the garden-railway world, including the editors of *Garden Railways* and the UK equivalent, *GardenRail*.

The landscape

The character of a garden railway is determined by many factors but especially by the landscape through which the railway runs. Plants and trees make the difference between a line being a "garden railway" as opposed to a "railway in a garden." Thanks to Becky's ideas and planning, the planting by the railway is in scale and attractive throughout the year. This experience of running trains in different seasons and in different weathers is to me one of the great things about garden railways that can never be replicated indoors.

Reading Dave's description of the evolution of the garden railway, it sounds as if we were planning it together from the start. The truth is that, in its early days, I

Plants on the Ambledown Valley Railway

Cookham, in Berkshire, England USDA Hardiness Zone 8

Plants providing an overall structure to the scene

EVERGREEN TREES AND SHRUBS

Golden boxleaf honevsuckle Lonicera nitida 'Baggesen's Gold' Common box Buxus sempervirens Variegated English boxwood Buxus sempervirens 'Variegata' Faulkner littleleaf boxwood Buxus microphylla 'Faulkner' Boxleaf euonymus Euonymus japonicus 'Microphyllus' Pompom pittosporum Pittosporum tenuifolium 'Pompom' Whipcord hebe Hebe cupressoides 'Boughton Dome' Heller's Japanese holly Ilex crenata 'Gold Tip Helleri' Variegated myrtle Myrtus communis 'Variegata' Littleleaf variegated myrtle Myrtus communis 'Microphylla Variegata' Olive Olea europaea

CONIFERS

Lobbii Nana Japanese cedar *Cryptomeria japonica* 'Lobbii Nana' Hinoki false cypress *Chamaecyparis obtusa* 'Nana Gracilis' Dwarf Irish juniper *Juniperus communis* 'Compressa' Gold Cone common juniper *Juniperus communis* 'Gold Cone' Dwarf black spruce *Picea mariana* 'Nana' Kissen mugo pine Pinus mugo 'Kissen' Standish yew Taxus baccata 'Standishii'

DECIDUOUS TREES AND SHRUBS

Dwarf Japanese barberry Berberis thunbergii 'Atropurpureum Nana' Dwarf arctic birch Betula nana Fuji cherry Prunus incise 'Kojo No Mai' Mountain or bearberry willow Salix arbuscula Nyewoods spirea Spirea x bumalda 'Nyewoods' Manchurian lilac Syringa velutina

Plants providing groundcover

Mossy sandwort Arenaria balearica Dwarf rockspray Cotoneaster congestus 'Nana' Thyme sea heath Frankenia thymifolia Creeping Charlie, moneywort Lysimachia nummularia Purple brass buttons Leptinella pusilla Nailwort Paronychia kapela Irish moss Sagina subulata Golden stonecrop Sedum acre 'Minor' Baby tears Soleirolia soleirolii Thyme Thymus sp.

Perennial plants providing color and texture

Pvrenees thrift Armeria juniperifolia 'Bevan's Variety' Wall cress, aubretia *Aubrieta* var. Baby Blue bellflower Campanula cochlearifolia 'Baby Blue' Silver cotula Cotula hispida Evergreen rock daphne Daphne x rolsdorfii 'Wilhelm Schacht' Heronshill Erodium corsicum Fairy foxalove Erinus alpinus Compact bloody cranesbill Geranium sanguineum 'Compact' Chamois cress Hutchinsia alpina Candytutt Iberis saxatilis 'Golden Candy' Rose cushion Phlox douglasii Creeping phlox Phlox subulata Kabschia saxifrage Saxifraga burseriana Least stonecrop Sedum İydium Reflexed stonecrop Sedum rupestre, syn. S. reflexum Cobweb houseleek Sempervivum arachnoideum Thyme Thymus sp.

(Becky) did not take a great deal of interest in the railway. I was quite happy to have it in the garden but, from the gardening point of view, I was too busy sorting out the rest of our plot. It was only gradually, and particularly after a visit from Marc and Barb Horovitz, that I began to understand how the railway could become an integral part of the garden. From then an interest in anything miniature in the horticultural world developed.

The landscaping of the railway has

therefore progressed alongside knowledge and understanding of what suits a miniature railway, given the soil type and aspect of our garden. As we hope you can see from the photographs, the AVR has evolved over the years and the joy of a garden railway is that this process is continuous and ongoing.

The railway shared

One of the great things about a garden railway is to be able to share it with others

and exchange ideas and experiences. We have hosted many steam ups over the years and have made many good friends, both locally and overseas, including visitors from the USA, Canada, Australia, and France. We have also kept a log of the different, visiting steam engines. Just recently, David Bailey's 1"-scale Heywood *Katie* was steam locomotive number 340 to run on the AVR. This works out to over 10 different new locomotives a year—quite a track record! **N**