2015

GWLW Suppliers, videos and more

David A Bainbridge
**Preface: Running Out of Water**

**Part 1: Super-Efficient Irrigation Systems**

Chapter 1. Buried Clay Pots (Ollas)
Chapter 2. Porous Capsules
Chapter 3. Deep Pipes
Chapter 4. Wicks
Chapter 5. Porous Hose
Chapter 6. Buried Clay Pipe
Chapter 7. Tree Shelters

**Part 2: Taking It to the Next Level**

Chapter 8. Waterwise Gardening Tips
Chapter 9. Rainwater Harvesting
Chapter 10. Landscaping for Water Catchment
Chapter 11. Developing a Plan for Your Patio, Garden, Home, or Farm
Conclusion: Our Water Future

---

**Buried clay pot “olla” irrigation**

**VIDEO**

Water wise gardening [http://www.youtube.com/watch?v=P1zJlwRz-s4](http://www.youtube.com/watch?v=P1zJlwRz-s4)
How to make an olla [www.youtube.com/watch?v=mv_UMoxTvQ](http://www.youtube.com/watch?v=mv_UMoxTvQ)
Cut your water bill in half [http://www.youtube.com/watch?v=KGxqShoGKFI](http://www.youtube.com/watch?v=KGxqShoGKFI)
Dripping springs ollas [http://www.youtube.com/watch?v=fvKq5geEM-A](http://www.youtube.com/watch?v=fvKq5geEM-A)
Micro oasis for development [http://www.youtube.com/watch?v=QBRsFg0Hz9A](http://www.youtube.com/watch?v=QBRsFg0Hz9A)
Buried clay pot and porous capsule irrigation [http://www.youtube.com/watch?v=hI5OjHwTyU](http://www.youtube.com/watch?v=hI5OjHwTyU)
Water wise gardening with buried clay pots [http://www.youtube.com/watch?v=P1zJlwRz-s4](http://www.youtube.com/watch?v=P1zJlwRz-s4)
Make a double wall pot [https://www.youtube.com/watch?v=XOPCjb9a-AQ](https://www.youtube.com/watch?v=XOPCjb9a-AQ)

**Ollas made for irrigation**

Ask at your local garden center or look on the web. Manufacturers include:

GrowOya.com
www.drippingspringsollas.com
www.kerseyceramics.com
www.arizonapottery.com/item.asp?iid=3394
www.eastcentralministries.org/ollas.aspx
and many others.
Use terra cotta nursery pots

Holes in clay pots can also be sealed with epoxy, hot melt glue, caulk, corks or ....

Rubber stoppers are very durable and seal well. Sizes for clay pot holes. Stopper are also sold with one or two holes--these can be used in porous capsules.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>TOP DIAM. INCHES</th>
<th>BOTTOM DIAM. INCHES</th>
<th>DIAM. HOLE FITS APPROX. INCHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>#000</td>
<td>1/2</td>
<td>5/16</td>
<td>7/16</td>
</tr>
<tr>
<td>#00</td>
<td>19/32</td>
<td>13/32</td>
<td>1/2</td>
</tr>
<tr>
<td>#0</td>
<td>21/32</td>
<td>1/2</td>
<td>19/32</td>
</tr>
<tr>
<td>#1</td>
<td>3/4</td>
<td>9/16</td>
<td>11/16</td>
</tr>
<tr>
<td>#2</td>
<td>25/32</td>
<td>5/8</td>
<td>23/32</td>
</tr>
<tr>
<td>#3</td>
<td>15/16</td>
<td>23/32</td>
<td>27/32</td>
</tr>
<tr>
<td>#4</td>
<td>1</td>
<td>3/4</td>
<td>15/16</td>
</tr>
<tr>
<td>#5</td>
<td>1 1/16</td>
<td>29/32</td>
<td>1</td>
</tr>
<tr>
<td>#6</td>
<td>1 1/4</td>
<td>1 1/32</td>
<td>1 1/8</td>
</tr>
<tr>
<td>#7</td>
<td>1 7/16</td>
<td>1 3/16</td>
<td>1 5/16</td>
</tr>
<tr>
<td>#8</td>
<td>1 5/8</td>
<td>1 5/16</td>
<td>1 1/2</td>
</tr>
</tbody>
</table>

The stoppers are all about 1 inch long, about 20¢ each from some sources. Many suppliers, try www.crscientific.com/stoppers.html

Porous capsule irrigation

VIDEO
Porous capsule introduction, Australia. http://www.youtube.com/watch?v=-oHfschbf1vw
Install WetPot for containers https://www.youtube.com/watch?v=se5apym2jZQ

WEB
Darrol Shillingburg www.darrolshillingburg.com/GardenSite/SubtlIrrigation

Suppliers
www.cuttingedgeceramics.com/economy-olla-ball-starter-kit.html

WetPot Australia http://wateringsystems.net/
Mark Wakeling, Wetpot Industries, 61 Charteris Street, Paddington QLD, Australia 4064 Ph: 07-3217-53 83, Fax: 07-3367-0884.
Porous capsule plant tenders (many vendors)
Texas Hill Country Ceramics & Gifts

You can also make your own porous capsules by gluing terra cotta nursery pots together. Polyurethane glue (e.g. Gorilla Glue), construction adhesive, epoxy, etc.

Plastic fittings for making porous capsules available from many sources. Graingers has an excellent selection. Polyethylene, nylon or poly propylene can all be used.

Deep pipe irrigation

VIDEO

Deep pipe drip installation https://www.youtube.com/watch?v=9_FcTrjbyHg

Suppliers
Deep Drip irrigation pipes from Home Depot and other suppliers www.deepdrip.com
Check website for distributors and agents around the world.
Stuewe and Sons tall narrow plant containers www.stuewe.com/products/deepots.php
AMS hand augers www.ams-samplers.com/category.cfm?CNum=6
Precut screen discs for deep pipes www.twpinc.com
French watering cans www.gardeners.com

Wick irrigation

VIDEO
Wick irrigation intro https://www.youtube.com/watch?v=1MRtdrJFm3Q

Wick systems
Groasis Waterboxx http://shop.groasis.com/
Gardener’s Supply  http://www.gardeners.com  Self watering hanging container with wick

**Suppliers**

**Wick materials**

Test before using by hanging a cut end in water with dilute food coloring and watching capillary rise.

Polyester rope – West Marine and others
Solid braid nylon – available from many sources but make sure it is pure nylon not a nylon/polypropylene blend.
Gulf Rope Pistachio wicking rope  http://gulfrope.com/agriculturehorticulture.html

Other ropes, yarns, ribbons and other materials may also be suitable.

Plastic fittings for making porous capsules available from many sources. I prefer to use 1/2” ID tubing and fittings. Graingers has an excellent selection. Polyethylene, nylon or poly propylene can all be used.

**Porous hose irrigation**

**VIDEO**
Porous hose installation tips.  https://www.youtube.com/watch?v=-4mAqdLeIZY
Installing plastic perforated pipe.  http://www.youtube.com/watch?v=iVWLG8LYtfQ

**Suppliers**
Low pressure porous hose  LP12UH, ID 9 mm, OD 14 mm, good to 0.1 bar.  www.leakypipe.co.uk
Low pressure porous hose OD 0.58 inch  www.Rainbarrelsoakerhose.com, also Rain Barrel Soaker Hose Kit #193.
Low pressure timer  Toro Zero Pressure Timer T0ZPT  www.dripworks.com
Low-pressure solar timer  www.Rainbarrelsoakerhose.com
Porous hose irrigation kits for garden and containers  www.gardeners.com
Disc type filters better than screen filters in some applications  www.netafimusa.com

**Buried clay pipe irrigation**


**Buried drain pipe irrigation**

Perforated or slotted drain pipe and filter fabric socks available at most home supply and landscape supply stores.
Tree shelters are available from many manufacturers and forestry supply firms:
Tubex [www.tubex.com](http://www.tubex.com), [www.treessentials.com](http://www.treessentials.com)
Plantra [www.plantra.com](http://www.plantra.com)
Foretub www.fortetube.com

**Rainwater harvesting**

**VIDEO**
Rainwater collection India [https://www.youtube.com/watch?v=wWnhYIIKYO0](https://www.youtube.com/watch?v=wWnhYIIKYO0)
Rainwater collection. [http://www.youtube.com/watch?v=RqbMonah8II](http://www.youtube.com/watch?v=RqbMonah8II)
Rainwater collection systems Texas [http://www.youtube.com/watch?v=WpOpqPWEyvE](http://www.youtube.com/watch?v=WpOpqPWEyvE)
Install a rainwater system New Jersey [https://www.youtube.com/watch?v=_KQwrxNUejA](https://www.youtube.com/watch?v=_KQwrxNUejA)
Rainwater collection. [http://www.youtube.com/watch?v=RqbMonah8II](http://www.youtube.com/watch?v=RqbMonah8II)
Water Rainglers by Thomas Berry vimeo
Four barrel systems [https://www.youtube.com/watch?v=U42i1rifWeA](https://www.youtube.com/watch?v=U42i1rifWeA)
Powerpoint, rainwater harvesting, biowater treatment and solar schools [www.ncprojectgreen.com/Presentations/GreenSchoolsNicklas.pdf](http://www.ncprojectgreen.com/Presentations/GreenSchoolsNicklas.pdf)
Large underground storage [www.youtube.com/watch?v=YdwKDVzh1cs](http://www.youtube.com/watch?v=YdwKDVzh1cs)

**WEB**
Web resources include the American Rainwater Catchment Systems Association ([www.arcsa.org/content.asp?contentid=6](http://www.arcsa.org/content.asp?contentid=6)), the Rainwater Harvesting Association of Australia ([www.arid.asn.au](http://www.arid.asn.au)) and India’s Centre for Science & Environment rainwater resource ([www.rainwaterharvesting.org](http://www.rainwaterharvesting.org/)).
Brad Lancaster’s excellent resource page [www.harvestingrainwater.com/rainwater-harvesting.../suppliers/water](http://www.harvestingrainwater.com/rainwater-harvesting.../suppliers/water)

**Suppliers**
Many manufacturers are now selling water tanks for rainwater storage, filters, and screens. Check at your local home supply store. National supply companies will often have a local agent or outlet. Gutters, gutter screens, diverters, filters available from many sources. Look locally first!

The Rainwater Hog system of modular tanks looks promising. [http://rainwaterhog.com](http://rainwaterhog.com)

Tank Depot [www.tank-depot.com/tanks/rainwater.aspx](http://www.tank-depot.com/tanks/rainwater.aspx)
Bushman [http://www.bushmanusa.com](http://www.bushmanusa.com)
Harmony Farm Supply [www.harmonyfarm.com](http://www.harmonyfarm.com)
Rain Tank Depot [www.raintankdepot.com](http://www.raintankdepot.com)
Rain Storage Inc [www.rain-storage.com](http://www.rain-storage.com)
Rain Reserve [www.rainreserve.com](http://www.rainreserve.com)
Water Solutions [www.sargwatersolutions.com](http://www.sargwatersolutions.com)
Life Rain [www.liferain.net](http://www.liferain.net)
It helps to have 10-30,000 gallons of storage. This will be less intrusive if it is underground or under a deck or patio. Several modular systems have been developed for this kind of installation.

**Large underground storage systems**
Conservation Technology [www.conservationtechnology.com/rainwater_storage.html](http://www.conservationtechnology.com/rainwater_storage.html)

Brad Lancaster’s tanks with wire mesh for vines. Look for his books and videos on rainwater harvesting.
[www.harvestingrainwater.com](http://www.harvestingrainwater.com)