

Green corridors in the East End

A multi-million pound dredging programme to revitalise the Olympic Park waterways is underway. The project is designed to improve water quality and open up the navigation to allow freight boats to carry construction materials into the site.

A 60-tonne craft has started dredging a 2.2km stretch of water from Bow Locks on Bow Creek to the Waterworks River, adjacent to the site of the Olympic Aquatics Centre. The craft is expected to remove 30,000 tonnes of silt, gravel and rubble as well as tyres, shopping trolleys, timber and at least one motorcar.

ODA environment manager, Richard Jackson said: "The Olympic Park is characterised by a series of waterways which act as green corridors running through the heart of the site. Currently, they are polluted, neglected and under-used, and have been treated as a dumping ground for everything from shopping trolleys to cars.

"This dredging programme is an important step in regenerating the waterways and will help improve water quality, creating better habitats for wildlife and plants."

Work began on the upper levels of the wharf this week and is due to be completed at the start of June.

Barges will then be able to travel into the park by water, via the new lock and water control structure – Three Mills Lock, at Prescott Channel. The £20m structure comprises twin water control gates, a 62m-long tidal lock, footbridge, lock control building, fish pass and fixed weir.

<http://www.landscape.co.uk/news/617>

陈诗瑶 荐

立体式栽培的应用与推广

立体栽培也叫垂直栽培是立体化的无土栽培，这种栽培是在不影响平面栽培的条件下，通过四周竖立起来的柱形栽培向空间发展，充分利用温室空间和太阳能，以提高土地利用率3-5倍，可提高单位面积产量2~3倍。立体的栽培柱采用杯状石棉水泥管、硬质塑料管、陶瓷管或瓦管，在管四周按螺旋位置开孔，并做成耳状突出，以便种植作物，栽培容器中装入基质，重叠在一起形成栽培柱。也可采用专门的无土栽培柱，栽培柱由若干个短的模形管构成，每一个模形管有几个突出的杯状物，用以种植作物。

<http://www.yyjsfw.com/html/edu/2330.html>

李莹 荐

管道式栽培的应用与推广

管道式无土栽培装置是由植物栽培室、营养液水池、自动定时供水器、上水及回水管组成。植物栽培室是由一根或若干根径向设置的管道间隔排列组成，管道上开有用于栽种的天窗。通过上水及回水管将植物栽培室与营养液水池连通。由自动定时供水器把营养液定时定量送往植物栽培室。该装置结构简单、造价低、自动化程度高、栽培劳动强度小，可充分利用楼顶、阳台、温室或沙漠、海岛、石山等一些生态条件较差的地区安装使用。它具有建设容易、管理方便、环境洁净、病虫害易控制的优点，所以它在生产上被广泛地运用于叶菜类小型蔬菜之生产。

<http://www.yyjsfw.com/html/edu/2328.html>

李莹 荐

蔬菜树栽培

所谓蔬菜“树”，主要是指果菜类蔬菜在现代温室设施条件下，采用无土栽培技术(基质栽培或水培)，利用蔬菜的遗传潜力，通过生理与栽培技术调控，使草本植物的蔬菜达到木本植物树状结构的观赏效果，并且还能获得比传统设施栽培高得多的单株产量。现在用于实际规划的有番茄、黄瓜、茄子等。

<http://www.yyjsfw.com/html/edu/2329.html>

李莹 荐

屋顶薄层绿化新技术

为城市创造绿色生态新空间

专用轻质培养土

采用保水性、保肥力、排水性和透气性优良的专用轻质人工培养土，其干容重不到普通土壤的四分之一。

专用架空排水板

薄层架空排水板取代普通碎石（或陶粒）排水层，厚度不到3厘米，重量仅为 3 kg/m^2 ，极大地提高排水效率。

高度的安全性能

采用防根系穿透层，对建筑物屋面层和防水层实施强力保护，避免植物根系损伤屋面和防水层而出现屋顶漏水现象。

轻量化薄层化

轻量化薄层化技术大大减轻了种植层的重量，整个种植层重量可以低至 65 kg/m^2 ，厚度薄至12厘米（种植草坪）。

广泛的适用性

既可以用于新建建筑，也可以用于现有建筑，极大地拓展了屋顶绿化推广普及的范围，为城市创造绿色生态新空间。

<http://www.yuanlin168.com/Garden/content/2007/12/7270.html>

俞冬梅 荐

北京将专题推介园林绿化新技术新材料

据悉，本次活动推介内容是历年来最丰富的一次，一大批当前园林绿化行业技术先进、实用性强、覆盖面广的科技成果都将集中亮相。推介内容包括新优植物，基质肥料，园林绿化工程、养护材料及配套技术，屋顶绿化、垂直绿化，有害生物可持续控制技术，节水、集水、雨洪利用，园艺资材，园林绿化机械，太阳能利用，森林防火视频监控，园林绿化信息技术，果树、花卉、蜂产业新技术、新材料等13个板块。

■亮点之一：自主创新技术

在2号展厅，中关村科技园区将组织一批实力派科技研发企业集中展示。

中关村是我国成立最早也是最大的高科技园区，现已形成跨行政区域的首都高端产业功能区，辐射全国并逐步走向国际。

这次参展的23家以自主创新或引进消化吸收再创新为主的科技研发企业，有的是园林绿化行业第一次接触，有的已经与园林绿化相关部门有密切的合作，通过参展有助于进一步促进中关村自主创新技术产品的宣传与应用推广，对于园林绿化行业相关单位了解和把握当前行业技术的最新发展动向、积极调整产业结构、促进科技创新、推动园林绿化行业又好又快发展具有重要意义。

■亮点之二：沙产业要亮相

在今年的推介会上，沙产业将第一次亮相。

近年来，随着北京生态建设速度的加快，治沙成果有目共睹。作为特色之一，北京治沙在取得生态效益的同时，也在着力谋求富及一方百姓。今年，在北京市科委的支持下，围绕沙产业，北京市园林绿化部门将开展深入研究，解决当前治沙工作中存在的瓶颈问题，实现资源整合，延长产业链条。本次推介会上，观众可以看到在沙荒地上栽培的各种特色产品——红富士苹果、板栗、果桑、饲料桑等，还有通过引进研发企业，经深加工后取得的玫瑰精油、玫瑰纯露、蘑菇、葛根等。林农在治沙的同时，享受着沙产业为他们带来的实惠。

■亮点之三：湿地保护恢复

湿地是地球之肾，在北京这样一个水资源匮乏的城市，要想保住宝贵的湿地资源谈何容易？

北京市重大科技项目“北京市湿地生态系统保护与恢复关键技术研究 and 示范”项目，紧紧围绕建设绿色北京和生态宜居城市的目标，坚持全面保护、生态优先、合理利用、持续发展的原则，开展了一系列湿地保护和发展方面的研究，目前已取得阶段性成果。本次推介会将扩大这一成果的宣传，项目成果将在北京地区陆续中试推广。

■亮点之四：新植物新基质

历届推介会上主打的新优植物、基质肥料，同样会在这次推介会上唱主角。在全部180多个展位中，以新优植物材料参展的有36个展位、名列第一，以基质肥料参展的有15个展位、名列第二。

<http://www.forestry.gov.cn/distribution/2009/03/17/lyyw-2009-03-17-30567.html>

俞冬梅 荐

屋顶人工湿地绿化新技术

屋顶人工湿地绿化新技术的基本理念：水是生命之源，有了水就会有生命的出现，大江大河沿线往往成为人类文明的发源地。自古以来，傍水而居已经成为人类的传统。目前很多高档花园小区都修建人工湿地调节小气候，改善人居环境。改变传统绿化固有思维模式，充分利用屋顶自身的光热水肥空间资源，将人工湿地建在平面屋顶上。依托人工湿地进行高效率屋顶绿化，变废为宝。

屋顶人工湿地绿化新技术的具体步骤及优点：在平面屋顶上安放可移动水池，在水池中注水喂养水生动物，栽种水生植物或水培植物；在平面屋顶上安放可移动有机垃圾处理池，对日常产生的有机垃圾进行无害化处理；在部分可移动垃圾处理池、可移动水池侧面设置为蛙类等有益生物提供隐藏栖息空间；在外墙走廊平台顶部营造利于燕雀等有益生物栖息的环境。可移动水池中的水生植物或水培植物绿化屋顶，可达到少养护管理甚至基本不管理的目标。水池中的鱼类等水生动物在消灭摇蚊幼虫等害虫的同时，可有效保持水质。蛙类、燕雀等有益生物可有效控制蚊虫等有害生物。经可移动有机垃圾处理池无害化处理后的有机垃圾，可作为肥料施用；或养殖蚯蚓、蝇蛆等，将有机垃圾转换为高蛋白活体饲料，变废为宝。由于可移动水池与屋面完全隔离，植物根系不会对屋面造成损害。将可移动水池中的水排出后，池体可以非常方便地移动，对日后屋顶的维护管理工作影响不大。老旧房屋平面屋顶绿化根据其具体承载能力，降低人工湿地的水位，亦可实现屋顶复绿。

屋顶人工湿地绿化新技术的可移动水池，前期建造费用是传统屋顶绿化技术的1/2—1/10；设计标准较低的简易可移动人工湿地前期建造费用甚至可达到传统屋顶绿化技术的1/30。

屋顶人工湿地绿化新技术简单高效，后期管理可基本实现免耕、免浇。对日常产生的有机垃圾资源化循环利用，住户在绿化环境的同时收获农副产品。该技术具有可复制、可推广、可持续等优点，是目前恢复平面屋顶生态环境的最佳方案，极具推广价值。

屋顶人工湿地绿化新技术前景

长期以来，城市大量闲置的屋面，因技术问题未解决不能被充分利用。屋顶人工湿地绿化新技术充分利用建筑物的空间、光热等资源，彻底解决了传统屋顶绿化技术前期投入大、后期管理麻烦、屋顶发生渗漏时补漏施工量太大等问题，为大面积恢复房屋生态环境提供了技术支持。进而达到保护、改善城市环境、健全城市生态系统、促进城市经济、社会、环境协调发展的目的。对多数城市来说，屋顶绿化至今还是人们所忽视的有待开垦的处女地。据估计，一座城市的屋顶面积总和，约为居住区的1/5，面积十分可观，开发前景非常广阔，其间蕴含一个巨大的绿色产业。总之，发展屋顶绿化利国、利民、利环境。

<http://www.china-landscape.net/wz1052.htm>

俞冬梅 荐

When it comes to materials and design, old thinking is being turned on its head— sometimes by even older thinking

Perhaps the most dramatic change in gardening in Canada has been the ban on lawn and garden pesticides for cosmetic use in a growing number of municipalities. But that's just the starting point; we're now re-evaluating some old ideas and adopting a plethora of new ones that are smart, healthy and chic. While some of these initiatives (such as saltwater pools) have a higher initial cost, the benefits to the environment—and to us—are incalculable.

OLD: Great expanses of lawn

Labour-intensive turfgrass—that water-guzzling boon to pesticide manufacturers—is slowly giving way to other options, including new types of turf.

New: Trees, shrubs, perennials and groundcovers planted as replacements for grass

OLD: Chlorinated swimming pools

Chlorine in large doses can give you red eyes and itchy skin, and can discolour your hair. Additionally, pool chlorine produces toxic byproducts such as chloroform and trihalomethanes that potentially contribute to a wide range of physical ailments.

New: Saltwater pools

These pools manufacture their own chlorine by means of a generator, but in much smaller doses.

OLD: Asphalt driveways

Because they are impermeable, asphalt driveways contribute to stormwater pollution; the rain runoff eventually adds to the toxins in our waterways.

New: Porous paving surfaces

This type of surface allows rainfall to permeate into the subsoil. Permeable options include cobblestones, paving blocks, plastic or fibrous grid systems filled with living plants, or specialty mixes of both concrete and asphalt.

OLD: CCA pressure-treated wood used in fences, decks, picnic tables and many play structures

Up until December 31, 2003, wood for residential use was pressure-treated with the preservative CCA (chromated copper arsenate) to protect it from the elements. Unfortunately, these chemicals can slowly leach out, causing health concerns. Today in North America, wood is pressure-treated with either ACQ (alkaline copper quaternary) or AZOL (copper azol), which is considered safer. However, experts caution that any pressure-treated wood should never be burned.

New: Redwood and cedar

These woods do not have to be treated; there are also many non-wood alternatives to consider, including plastic and metal. The revival of dry stone walls is a charming and durable alternative to fencing.

Eco-trends to watch

Green roofs

This is an old idea long embraced in Europe that is being adopted in North America, with aesthetic and environmental advantages (see Raising the roof).

Straw bale outbuildings

Another redeployed ancient technique, the straw bale (made of easily renewable crops such as wheat, oats, barley, rice, rye, hemp or flax) can be used as building material and eliminates the needs for framing lumber, plastic barriers and manufactured insulation in structures such as garden sheds, barns and garages. It has minimal environmental impact both during and after construction.

Living walls

These can be simple (walls covered in plants rooted in a growing medium) or complex (surfaces connected to a building's air-conditioning, heat and filtration systems). Indoors or out, these living marvels absorb contaminants and deliver them to the beneficial microbes in the plant roots, where they're broken down and converted into water and carbon dioxide.

Potager gardens

A traditional idea made new, ornamental vegetables, herbs, edible flowers, decorative annuals and perennials are planted together to give pizzazz to the less attractive vegetables they accompany. The result is a practical kitchen garden with élan.

<http://www.canadiangardening.com/how-to/organic-gardening/replace-old-gardening-habits-with-new-eco-trends/a/21328/2>

肖霞 荐