



Israel, Jordan unite in effort to save dying Dead Sea

以色列和约旦联手拯救正在消亡的死海

By Mark Heinrich

译者点评:“死海正在死亡?”,“死海可能真要‘死’了”,“死海面临枯竭”。近年来,这样的标题频频出现在媒体,拯救死海的呼声也不绝于耳。可见“死海正在走向死亡”并非危言耸听。死海含盐量高达30%,水生生物无法存活,沿海和四周都是不毛之地,故称死海。含盐量高,浮力也大,躺在上面可以看书,真是难得一景。加之死海含有丰富的矿物质,一向是SPA浴和治疗慢性病的好去处,自古以来不知吸引了多少慕名而来的游客。可是,如今,作为死海水源的约旦河水被挪作灌溉农田之用,造成湖水逐渐后退,死海不断萎缩,正面临枯竭的危险。沿海采矿也给生态环境造成严重破坏。因此,以色列和约旦正考虑联手拯救死海,方案是铺设输水管,引红海水到死海来。本文正是从这里展开的,从中我们可以看到死海目前的现状以及拯救死海的种种考虑。

It has shimmered and steamed at the lowest point on Earth *since time immemorial¹. Its silence, seclusion and healing powers have lured people from biblical mystics to modern eco-tourists. But the Dead Sea has been quietly dying for years.

And the two states abutting its shrinking shoreline, Israel and Jordan, face formidable economic and ecological challenges in pondering how to save a unique natural wonder of the world.

They have begun to consider a “Red-Dead” solution—a canal to pump water from the Red Sea to the Dead Sea. But huge costs, and the risk both of damaging the Red’s famed coral reefs and diluting the Dead’s medicinal minerals, stand in the way.

Known as the Dead Sea because nothing can live in it, the world’s saltiest body of water has fallen from 390 metres to 417 metres below sea level in the last 50 years. The drop has accelerated to a metre a year recently, erasing a third of its ancient 950 square km size. Modern economics are to blame—diversions to rain-starved farmland of Jordan River waters that feed the Dead Sea, and evaporation hastened by potash-mining in its southern basin. ▶

自远古以来,它一直在陆地的最低点波光粼粼,冒着水汽。它的宁静、僻静和治疗力吸引着从《圣经》时代的神秘主义者到现代的生态旅游者。可是,多年来,死海正在悄悄消亡。

而紧靠死海不断缩小的海岸线的两个国家以色列和约旦,面临着考虑如何挽救这个世界上独特自然奇观这样一个棘手的经济和生态挑战。两国已开始考虑“红海-死海”的解决方案,也就是挖一条运河,把红海水引入死海。但是,困难是造价高昂,还有两个风险,一是破坏红海有名的珊瑚礁,二是冲淡死海有医疗作用的矿物质。

之所以叫死海是因为生物无法在其中存活。50年来,这个世界上最含盐量最高的死海已从低于海平面390米萎缩到417米。近来,这种萎缩以每年1米的速度在加快,使其古时候950平方公里的面积缩减了三分之一。这要归咎于现代的经济活动,也就是,作为死海水源的约旦河水改道灌溉缺少雨水的农田,死海南端▶

Hotels and health spas built along the beach below spectacular rose-and-orange-hued desert cliffs, as well as sites holy to Jews, Christians and Muslims, are now stranded a kilometre or more from the water's edge. Retired Swiss couple Jean and Esther Haensenberger have been spending their annual "Kur"—a Central European tradition of taking medicinal baths to treat skin ailments and stress—at Israel's flagship Dead Sea resort of Ein Gedi since the 1980s. At first, they could walk a few paces from the Ein Gedi Spa complex to the beach for a float in windless waters so buoyant that one can read a book while lying on one's back. Now visitors board a tractor-drawn trolley that shuttles them a kilometre to the water, avoiding a trudge across mudflats in sauna-like heat typifying the inland sea's micro-climate.

"It's over twice the distance out today. It's sad that another rare preserve of nature is vanishing," said Jean Haensenberger as he and his wife rode to the shore. "If the sea keeps going down, will people like us keep coming?" The number of foreign tourists in Israel has dropped because of a three-year-old Palestinian revolt. And tourism in Jordan has suffered from war and postwar turmoil in nearby Iraq. Now the Dead Sea's retreat is worsening the economic fallout of Palestinian violence along the western shore by spawning² subsidence—more than 1,000 "sinkholes" up to 20 metres deep and 25 metres across.

Caused by a dissolution of salt strata in underground fresh water replacing departed salt water, sinkholes have swallowed up groves of date palms, shut down Ein Gedi's tourist campsite and a nearby army base and scuttled a 5,000-room hotel project nearby. "We closed the campsite after the earth trembled and the road to the site suddenly caved in right behind a passing bus full of Danish tourists," said Eli Rav, a regional geologist and environmental consultant, pointing at a crater in the asphalt. A camp staffer and a worker at Ein Gedi's nearby palm plantation were sucked into collapsing sinkholes and injured.

Sinkholes appearing on the Jordanian shore have forced the evacuation of more than 3,000 people. Hundreds of millions of dollars worth of hotel-spa complexes in the planning could be at risk. "We fear that by 2050 there will be just a small spot of water that will be a disaster economically and ecologically, if nothing is done," said Zafer Alem, secretary general of the Jordan Valley Water Authority. "We are raising the red flag ▶

采钾碱矿加速死海的蒸发。

如今,在蔚为壮观的玫瑰色和橙黄色沙漠峭壁下面,沿着海滩修建的旅馆和减肥温泉疗养地以及犹太教徒、基督教徒和穆斯林奉为神圣的地方,现在离水边有1公里多远。自从20世纪80年代以来,瑞士退休夫妇让·汉金森伯格和埃斯特·汉金森伯格每年在以色列第一流的死海胜地艾因盖迪度“库尔”——中欧洗医疗浴治皮肤病和缓解疲劳的一种传统。起初,他们从艾因盖迪的疗养院走几步就到海边,在无风的海面上漂浮,死海浮力很大,可以仰面在海上躺着看书。如今,游客要乘坐由拖拉机拉的小车跑1公里到水边去,免得在炎热的桑那天步行走过淤泥滩,这种桑那天是内陆海小气候的典型特征。

让·汉金森伯格和他妻子乘车到岸边时说:“如今,这段距离多了1倍以上。另一个少有的自然保护区正在消失,真可悲。如果海水继续下降,像我们这样的人还会继续来吗?”由于3年来的巴勒斯坦暴动,到以色列的外国游客人数已减少,约旦的旅游业也由于邻国伊拉克的战争和战后的动乱而受到影响。如今,死海的萎缩使巴勒斯坦暴动下的经济雪上加霜,因为在死海西海岸出现了许多下陷,有1000多个“凹坑”,每个凹坑深20米,宽25米。

由于地下淡水代替原先的咸水而引起的盐层融化,这些凹坑吞噬了一些椰枣林,使得艾因盖迪一个旅游营地和附近一个军事基地关闭,附近一个有5000个房间的饭店项目也完全丢弃。当地的地质学家和环境顾问埃利·拉夫指着柏油路中的一个坑说:“我们之所以关闭这个营地,是因为在一辆满载丹麦游客的汽车驶过之后,地面颤抖,通往营地的公路突然塌陷。”营地一个工作人员和艾因盖迪附近的椰枣种植园的一名工人陷入倒塌的凹坑中,受了伤。

在死海约旦岸边出现的凹坑迫使3000多人撤走。计划中的价值数亿美元的饭店疗养院的综合设施项目可能有危险。约旦河谷水利管理局秘书长扎菲尔·阿利姆说:“我们担心,如果不采取措施,到2050年之前,死海将只剩下一点点水,那将是经济上和生▶

1. = from time immemorial 自远古以来
2. spawn [spɔ:n] vt. 引起,酿成

to the international community to help us save what is really a world heritage site, belonging not just to Jordan and Israel," he told Reuters by telephone.

At the Earth Summit in Johannesburg over a year ago, Israel and Jordan agreed to look into building a "Red-Dead" pipeline that would run 320 km along their rugged desert border. Dubbed the "Peace Conduit", the canal would be the biggest Israel-Jordanian joint venture since their 1994 peace treaty. Israeli officials cite the importance of cooperation with former Arab enemies as one of the main reasons they favour the Red-Dead canal over an older "Med-Dead" proposal to take water from the Mediterranean Sea, which would not involve Jordan.

At a World Economic Forum meeting held on the Jordanian Dead Sea in June 2003, Israelis and Jordanians united at a packed session to voice enthusiasm for the project. The World Bank has prepared a draft for a feasibility study. Once approved by each government, donor funding would be sought. Studies and construction could take a decade and cost several billion dollars, part of that for desalination plants that Jordan sees as a vital spin-off to relieve its severe shortage of drinking water, officials say.

"Our main concern is that drawing off water on a large scale from the Red Sea could alter its currents and threaten its coral reefs," said Valerie Brachnya of Israel's Environment Ministry. The Red's riot of tropical reef fish is a big tourist draw. Gidon Bromberg of the environmentalist Friends of the Earth group said that stretching a salt-water pipeline through an earthquake-prone region was another worry. "If the pipeline leaked, it would contaminate fresh water aquifers³. And Red Sea water could well destroy the medicinal value of the Dead Sea derived from its high salinity," he said. "Furthermore, the Dead Sea could turn pink or white from the chemical change incurred in mixing two different kinds of water. That would be a real turn-off⁴ to visitors." Environmentalists are pressing Israel and Jordan to have UNESCO declare the Dead Sea a World Heritage Site or Biosphere Reserve which would curb commercial development they say has been hastening its demise. ■



态上的一场灾难。”他在电话中对路透社记者说：“我们正向国际社会举起红旗，呼吁帮助我们挽救不仅仅属于约旦和以色列的这个名副其实的世界遗产区。”

一年多以前在约翰内斯堡举行的地球峰会上，以色列和约旦同意为铺设一条“从红海到死海”的输水管做调查，输水管沿着两国高低不平的沙漠边境长 320 公里。叫作“和平输水管”的这条运河将是以色列和约旦于 1994 年签署和平条约以来最大的合资项目。以色列官员指出同前阿拉伯敌人合作的重要性是他们宁愿搞红海-死海运河而不采纳不涉及约旦的引地中海海水的“地中海-死海”建议的主要原因之一。

2003年6月在约旦死海举行的世界经济论坛会议上，以色列和约旦代表在一次人山人海^一的会议上一致对这个项目表示很热心。世界银行已起草了可行性研究的草案。这项草案一旦得到两国政府批准，就将寻求捐赠国提供资金。官员们说，研究和建设可能需要10年时间，要投资几十亿美元，其中部分资金用于建海水淡化厂，约旦把海水淡化厂作为一个重要的附带产物，目的是减轻约旦严重缺少饮用水的问题。

以色列环境部官员瓦莱丽·巴拉奇恩亚说：“我们主要担心的是，大量抽走红海水可能改变红海的潮流并威胁到它的珊瑚礁。”红海丰富多采的热带珊瑚鱼类是很吸引游客的。环保主义者地球之友组织的吉东·布龙贝格说，让一条输送咸水的水管通过地震多发区是另一个担心的问题。他说：“如果输水管泄漏，就会污染地下淡水层。而且，红海水很可能破坏死海由于咸度高而具有的医疗价值。还有，由于两种不同的水混合所引起的化学变化，死海可能变成淡红色或白色。这真的会叫游客倒胃口的。”环境保护主义者正敦促以色列和约旦要求联合国科教文组织宣布死海为世界遗产区或生物圈保护区，以遏制他们所说的加速死海灭亡的商业开发。

(新文 摘译自 Reuters Sep. 30, 2003)

3. aquifer [ˈækwɪfə(r)] n. (可供凿井取水的) 地下蓄水层
4. turn-off n. <□>令人厌烦的事物; 叫人倒胃口的东西