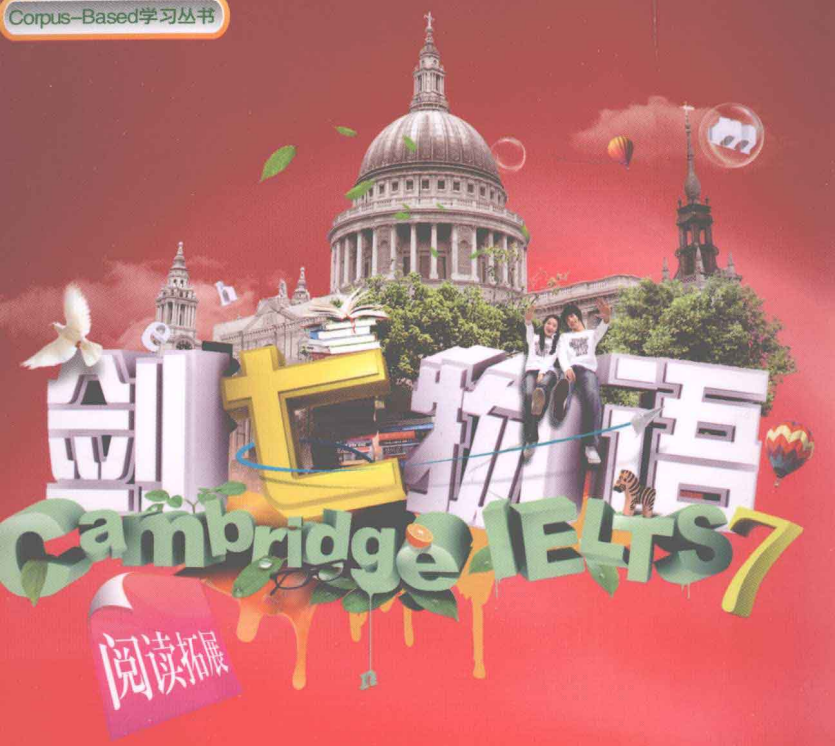
新东方
NEW ORIENTAL

新东方雅思国际学习中心

Corpus-Based学习丛书



剑七精读

Cambridge IELTS 7

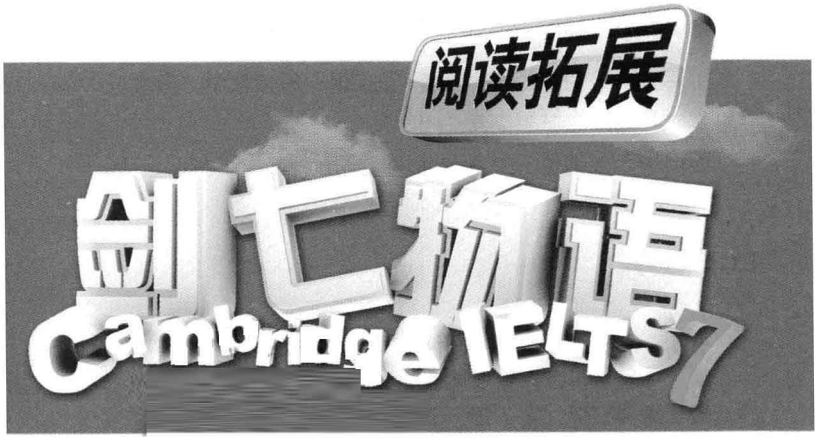
阅读拓展

借助语料库技术，科学遴选题源文章菁华
凸显愉悦性阅读，悄然提升雅思备考能力

本书全部内容均来自对《剑七》真题的分析

IELTS International Learning Center
雅思国际学习中心

北京语言大学出版社
BEIJING LANGUAGE AND CULTURE UNIVERSITY PRESS



新东方雅思国际学习中心

本书编委会
主　任：周成刚
委　员：陈国辉　耿　耿　高林显　郭潇潇
何　钢　贾云龙　娄默默　任　林
任胜雷　孙吉芯　孙　钋　徐　琳
余春辉　张弛新　赵晓麟　赵　旭

北京语言大学出版社
BEIJING LANGUAGE AND CULTURE UNIVERSITY PRESS

图书在版编目(CIP)数据

剑七物语. 阅读拓展 / 新东方雅思国际学习中心编著. —北京：北京语言大学出版社，2010.12
ISBN 978-7-5619-2919-3

Ⅰ.①剑… Ⅱ.①新… Ⅲ.①英语—阅读教学—高等教育—自学参考资料 Ⅳ.①H31

中国版本图书馆 CIP 数据核字（2010）第 228666 号

书　　名：剑七物语·阅读拓展
编　　著：新东方雅思国际学习中心
责任编辑：李　亮　李　强
封面设计：朱殿涛

出版发行：北京语言大学出版社
社　　址：北京市海淀区学院路 15 号　**邮政编码**：100083
网　　站：www.blcup.com
电　　话：发行部　(010)62605588 /5019 /5128
　　编辑部　(010)62605189
　　邮购电话　(010)62605127
　　读者服务信箱　bj62605588@163.com
印　　刷：北京四季青印刷厂
经　　销：全国新华书店

版　　次：2010 年 12 月第 1 版　2010 年 12 月第 1 次印刷
开　　本：787 毫米×1092 毫米　1/32　**印张**：5.125
字　　数：136 千
书　　号：ISBN 978-7-5619-2919-3
定　　价：15.00 元

悦读雅思

雅思阅读考试分为A类(学术类)和G类(培训类)两种，前者为三篇文章，总词数在2,000至3,000之间，后者则分为三个部分，约五篇文章，总词数在2,400左右。二者都要求考生在60分钟内完成40道花样繁多的试题。由于文章篇幅很长，句式复杂，而且题材多涉及学术类内容，用语专业，因此许多雅思考生视阅读为畏途，甚至幻想通过略施小计来获取阅读高分。然而，参加"后雅思考试时代"的雅思阅读考试，想通过模板、技巧蒙混过关的可能性已经不复存在了，那种鼓吹看不懂文章也能做对题的技巧只能使人误入歧途。雅思这种国际英语语言测试系统是全球认可的英语语言能力评估系统，虽然试题形式五花八门，但考查方法科学，考查内容仍是考生平日积累的知识和能力。虽然阅读能力的提高绝非一朝一夕之功，但是考生大可不必将雅思阅读视若寇仇，在复习时痛心疾首，深恶痛绝。备考雅思是实现国外学习和生活梦想的必由之路，我们完全可以将这一过程变得其乐无穷，这便是本书的编写意图所在。

仿真阅读 本书所包含的文章均选自 *New Scientist, The Economist, American Scientist* 和 *Scientific American* 这些雅思真题的发源地，其体裁、题材、篇幅、难度、句式等均经过新东方雅思国际学习中心设立的"剑桥雅思考试分析系统"的分析，该系统对雅思真题的各类考点、语言点以及中国考生的常见问题和错误，进行了科学、系统的处理，从而使本书为满足中国考生的真实需求提供了科学高效的学习内容。

斑斓阅读 本书所选文章不但与真题同源，而且题材多样，涉及科技、环境、心理、医学、生物、生活、自然、经济等多个方面。所选文章的文体有议论性的、评论性的、报道性的和分析论证性的，这一点也与真题相吻合。全书除主要收录A类阅读文章(前18篇)外，还特意选取两篇G类阅读文章（最后两篇)，供考生对两类文章的特点作一对照。同时，书中收录的 *The Way We Eat* 和 *Researchers Lift*

Obelisk with Kite to Test Theory on Ancient Pyramids 两篇文章曾被测试专家慧眼识中，经修改和删节之后成为真题。但需要说明的是，考生在此所看到的则是毫发未损的原生态的文章，由此及彼，考生可体味真题的诞生过程。

轻松阅读 本书收录文章共计20篇，与“剑一”至“剑七”中的阅读文章数量相当，每篇文章都附有注释和译文。注释详尽，对文章所涉及的文化背景也有所阐释；译文通达，考生借此可加深对原文的理解。每篇文章后没有设置试题，此举意在让考生明白，备考雅思并非一味做题，为考试而考试并不能确保在雅思考试中独占鳌头。当你以一种坦然放松的心态去了解埃及金字塔建造之谜、犬科动物交往时表现出的道德智慧、机器人的发展远景等领域的知识，领略作者犀利幽默的文笔，欣赏某个精妙绝伦的词语或句子，这时会别有一番乐趣在心头，你的阅读能力也会在潜移默化中产生质的飞跃。

多元阅读 在英语学习中，阅读是学习单词、短语、句式、语法、文章结构、思想表达方式的最直接和最有效的手段。我们建议考生使用本书时可将文章中出现的学术性词汇和主题词汇借助注释总结一下，记录在本子上，然后再回归到语境中进行理解和记忆，这实际上也是一个分析句子的过程；句子分析透彻之后，对相关的语法规则也会逐渐熟悉起来，把握句子主要信息的能力也会得到相应提升。文章读完之后，还可以回过头来推敲一下作者的行文思路、语篇结构以及文章衔接连贯的方式。经过以上的反复和推敲，阅读中积累的词汇在听力中再现时我们会轻易识别，阅读中掌握的句式在口语中我们可以随口运用，阅读中欣赏到的行文思路在写作中我们可以模仿借鉴。如此多管齐下，雅思考试所考查的各项技能在此都得到了训练，英语能力定能整体提高。

衷心祝愿广大考生以轻松的心态和过人的实力，赢取雅思阅读高分。

新东方雅思国际学习中心 研发部

目 录

ARISTOTLE'S ERROR

Although our perception of the world seems effortless and instantaneous, it actually involves considerable image processing. Curiously enough, much of the current scientific understanding of that process is based on the study of visual illusions.

Analysis and resolution of an image into distinct features begin at the earliest stages of visual processing. This was discovered in cats and monkeys by a number of techniques, the most straightforward of which was to use tiny needles—microelectrodes—to pick up electrical signals from cells in the retina[1] and the areas of the brain associated with vision. By presenting various visual targets to monitored animals, investigators learned that cells in early-processing brain areas are each sensitive mainly to changes in just one visual parameter[2], not to others. For instance, in the primary visual cortex[3], the main feature is the orientation of edges. In the area known as V4 in the temporal lobes[4], cells react to color.

One characteristic of these cells that may seem surprising is that their activity when stimulated is not constant. A neuron that responds to red, for instance, will initially fire vigorously but taper off[5] over time as it adapts, or "fatigues," from steady exposure. Although part of this adaptation may result from depletion[6] of

---

1 **retina** /'retɪnə/ *n.* 视网膜
2 **parameter** /pə'ræmɪtə(r)/ *n.* [数]参数
3 **cortex** /'kɔ:teks/ *n.* [医]脑皮层
4 **temporal lobe:** 颞叶
5 **taper off:** 逐渐减弱，逐渐停止
6 **depletion** /di'pli:ʃən/ *n.* 消耗，用尽

neurotransmitters[1], it also likely reflects the evolutionary logic that the goal of the cell is to signal change rather than a steady state.

How do we know that such cells also exist in humans? Simply put, we descended from apelike ancestors, and there is no reason why we would have lost those cells during evolution. But we can also infer the existence (and properties) of feature-detecting cells in humans from the results of psychological experiments in which the short-term viewing of one pattern very specifically alters the perception of a subsequently viewed pattern.

For example, if you watch a waterfall for a minute and then transfer your gaze to the grass on the ground below, the grass will seem to move uphill. This illusion occurs because the brain normally interprets motion in a scene from the ratio of activity among cells responding to different directions of movement. By gazing at the waterfall, you fatigue the cells for downward movement; when you then look at a stationary image, the higher baseline of activity in the upward-motion cells results in a ratio that is interpreted as the grass going up. The illusion implies that the human brain must have such feature-detecting cells because of the general dictum[2] that "if you can fatigue it, it must be there."

The waterfall effect was first noted by Aristotle. Unfortunately, as pointed out by 20th-century philosopher Bertrand Russell, Aristotle was a good observer but a poor experimenter, allowing his preconceived notions to influence his observations. He believed, erroneously[3], that the motion aftereffect was a form of visual inertia[4], a tendency to continue seeing things move in the same direction because of the inertia of some physical movement

---

1 **neurotransmitter** /ˈnjʊərəʊtrænzmɪtə(r)/ *n.*【生】神经传递素
2 **dictum** /ˈdɪktəm/ *n.* 名言，格言
3 **erroneously** /ɪˈrəʊniəsli/ *adv.* 错误地
4 **inertia** /ɪˈnɜːʃə/ *n.*【物】惯性

stimulated in the brain. He assumed, therefore, that the grass would seem to move downward as well—as if to continue to mimic the movement of the waterfall! If only he had spent a few minutes observing and comparing the apparent movements of the waterfall and the grass, he would not have made the mistake.

The principle of motion adaptation isn't all that different from the one illustrated by the color aftereffect. Stare at the fixation spot in a between the two vertically aligned[1] squares—the top one red, the bottom one green. After a minute, look at the blank gray screen in b. You should see a ghostly bluish-green square where the red used to fall in your visual field and a reddish square where the green used to be. The effect is especially powerful if you blink your eyes.

This color-adaptation aftereffect occurs mainly in the retina. The eye has three receptor pigments[2]—for red, green and blue—each of which is optimally (but not exclusively) excited by one wavelength. Light that contains all wavelengths and thereby stimulates all three receptors equally yields a ratio that the brain interprets as white. If your red color receptors become fatigued from staring at a red square, then when you look at a field of white or light gray, the ratio of activation shifts in favor of greenish blue, which is what you see.

Orientation adaptation, discovered by Colin Blakemore is another striking example of this phenomenon, except that it occurs in the brain, not the eye. Stare at the anticlockwise-tilted lines in c for a minute and then transfer your gaze to the vertical lines in d. You will be startled to find the vertical lines tilted in the opposite direction, clockwise. This perception allows the inference that orientation-specific cells do exist in the human brain: the

---

1 **aligned** /əˈlaɪnd/ *adj.* 排列的

2 **pigment** /ˈpɪgmənt/ *n.* 色素；颜料

paper because your eye movements ensure that all color receptors are equally stimulated on the retina, whereas cortical[1] cells that have an orientation specificity are not stimulated.

Therefore, with a 10-minute experiment, we have shown the existence of neurons in the brain that require the joint presence of a specific color and orientation to fire. The adaptation effects that result from fatiguing them are called contingent[2] aftereffects. The McCollough effect is an orientation-contingent color aftereffect.

1 **cortical** /ˈkɔːtɪkl/ *adj.* 【医】脑皮层的
2 **contingent** /kənˈtɪndʒənt/ *adj.* 附随的

practice. The Crown Estate[1], which owns the seabed around the UK, auctioned off[2] the rights to exploit wind power over thousands of square kilometres of open sea, mostly in the North Sea. In the next 10 years, these areas should become home to 6000 turbines[3] capable of generating around 30 gigawatts[4] of power—enough to supply a quarter of the UK's electricity needs.

This is one of the largest civil engineering projects on the planet. It comes with a price tag to match: a hefty[5] £75 billion, according to Benj Sykes, a geologist at the Carbon Trust[6]. Sykes's job is to identify technologies that will smooth the path to offshore renewables and to find ways around bottlenecks that prevent rapid adoption.

Perhaps the biggest initial challenge is to make the whole project profitable enough to attract big finance. To do that needs new thinking on a range of technologies and procedures to cut costs. For example, there is the problem of siting turbines on the seabed cheaply and efficiently. To sit in waters up to 60 metres deep, offshore wind turbines will have to be gigantic: from base to blade tip they will stand 220 metres tall. The foundations of these monsters must be built to exacting[7] standards while remaining cheap and easy to install.

---

1 **the Crown Estate:** 英国皇家财产局，是由皇室所有的一个财产投资组合。它虽为君主所有，但并非在任君主的私有财产，财产投资收益也非君主个人所得。其管理权属于一个独立机构，完全向议会负责。

2 **auction off:** 拍卖掉

3 **turbine** /'tɜːbaɪn/ *n.* 涡轮机

4 **gigawatt** /'dʒaɪgəwɒt/ *n.* 【电】十亿瓦特

5 **hefty** /'hefti/ *adj.* 大量的，可观的

6 **Carbon Trust:** 碳基金公司，一个由政府投资、市场运作的独立公司，成立于 2001 年，其目标是通过帮助商业和公共部门来减少二氧化碳的排放，捕获低碳技术的商业机会，从而帮助英国走向低碳经济社会。

7 **exacting** /ɪg'zæktɪŋ/ *adj.* 苛求的，严格的

If the UK is going to hit its CO_2 targets, the rate at which turbines are being deployed needs to increase from the present one turbine every 11 days to more than two a day. The Carbon Trust recently held a competition to find new ways of attaching turbines to the sea floor. The trust is funding seven of the winning ideas, which range from undersea tripods[1] to structures that are kept in place by moorings on the seabed.

Improvements are also needed in the way turbines are installed. Conventionally, they have been carried out to sea in pieces and put together in situ[2]. The base of each mast[3] has to be attached to a pile[4] that extends into the seabed, after which the turbine and rotor are assembled at the top.

All this requires ocean-going barges[5] with pile-driving equipment and heavy lifting cranes. Such craft are in seriously short supply, and demand for them means that the cost of building wind farms is soaring. Sykes is looking at new ways to deploy[6] turbines more quickly without all this gear[7]. One idea is a "self-deploying" turbine that stands on a tripod and attaches to the seabed via huge anchors that work like suction cups[8]. The whole structure is constructed on land, towed out to sea on a barge and simply lowered into place.

There are other ways to cut costs. One goal is to find cheaper, easier ways for maintenance engineers to access turbines even in rough seas, a feat sometimes achieved by

---

1 **tripod** /'traɪpɒd/ *n.* 三脚架
2 **in situ:** 在原来的位置
3 **mast** /mɑ:st/ *n.* 桅杆
4 **pile** /paɪl/ *n.* (桥梁等的)桩
5 **barge** /bɑ:dʒ/ *n.* 驳船
6 **deploy** /dɪ'plɔɪ/ *vt.* 配置
7 **gear** /gɪə(r)/ *n.* 器械,装置
8 **suction cup:** 吸盘

winching[1] someone down from a helicopter. Another area where Sykes thinks there is potential for savings is in minimising[2] the effect of wind shadow, where the wake of one turbine reduces the output of generators downwind. There is also scope for making the systems that transmit electricity to shore more efficiently. Taken together, all these savings could cut costs by 20 per cent, says Sykes. That could amount to £14 billion, creating a potential profit margin for investors that should attract the big boys[3]. Wind turbines aren't the only way to harvest energy offshore. In the depths of Strangford Narrows, at the entrance to Strangford Lough[4] in Northern Ireland, sits SeaGen[5], the world's first commercial-scale facility producing energy from tidal flows. Its two turbines are each turned by giant rotors 16 metres in diameter, and each is capable of generating 600 kilowatts.

Although its mode of action is similar to that of a wind turbine, the stresses on SeaGen are significantly greater. "The tidal race is equivalent to a fast-moving wall of water seven storeys high, coming at you at 2 metres per second," says Peter Fraenkel, technical director of Marine Current Turbines[6], the company that built SeaGen. This exerts well over 100 tonnes on the rotor blades with the tide running at full pelt[7]. It is truly the problem of finding an immovable object to withstand an irresistible force and there is

---

1 **winch** /wɪntʃ/ *vt.* 用绞盘拉
2 **minimize** /'mɪnɪmaɪz/ *vt.* 使减至最小量或最低程度
3 **big boy:** 大人物，大亨
4 **Strangford Lough:** 斯特兰福德湖(爱尔兰海的入口，位于北爱尔兰)
5 **SeaGen:** 世界最大的具有商业目的的潮汐能发电设备。当满负荷运行时，其输出功率能达到 1200 千瓦，可以为 1000 个家庭提供电力。
6 **Marine Current Turbines Ltd:** 海事洋流涡轮机公司(MCT)，一家致力于利用潮汐能进行大规模发电的技术开发公司，成立于 2000 年，位于英国西部的布里斯托尔市。
7 **at full pelt:** 以极高的速度

no point in making the rotors much bigger because of diminishing returns in the amount of power generated.

That opportunity is likely to come sooner rather than later. Two weeks ago, the Crown Estate announced that Marine Current Turbines had been awarded the chance to generate up to 100 megawatts—that's eighty times as much power as SeaGen can produce. It also includes opportunities for two other would-be tidal-stream companies and five wave-power companies. Wave power is not as well advanced as wind and tidal energy, but the rate of development is set to increase.

One reason wave power has been held back is a lack of facilities to enable prototypes and demonstration machines to be easily tested. However, that picture has changed in recent years with the development of sites such as the European Marine Energy Centre in Orkney, the world's first facility for full-scale testing. Cornwall is about to get Wave Hub[1], effectively a plug-and-play[2] socket on the sea floor for wave-power companies to try out new ideas. None of these projects is worry-free. Environmentalists have expressed fears that SeaGen's huge rotors would shred[3] any seals unlucky enough to get drawn into their slipstream, though so far these have proved unfounded. And the threat wind farms pose to migrating birds is well documented.

Despite these concerns, the offshore energy revolution is under way and is likely to be generating significant power, jobs and income in the not too distant future. How much we in the UK will pay for that revolution and the electricity it yields will depend largely on the ingenuity of inventors and the innovations they come up with.

---

1 **hub** /hʌb/ *n.* 中心，枢纽

2 **plug-and-play socket:** 即插即用插座

3 **shred** /ʃred/ *vt.* 撕碎

PARASITE LOST[1]: EXTERMINATING[2] AFRICA'S HORROR WORMS

It starts with a painful blister[3]—very painful blister. It feels, people say, like being stabbed with a red-hot needle. When the blister bursts, the head of a worm pops out[4], thin, white and very much alive.

The rest of the worm, about a metre long, remains inside your body. It can take up to two months to pull it out, inch by agonising inch, during which time it may be impossible to walk. In extreme cases, you may host up to sixty of them, anywhere on your body. The worms can cause paralysis[5] or lethal[6] bacterial infections, and even if you survive mostly unscathed[7], next year it can happen all over again.

The guinea worm[8] (Dracunculus[9], or little dragon) is probably

---

1 **Parasite lost:** 此标题模仿了约翰·弥尔顿（John Milton）的史诗 *Paradise Lost*（《失乐园》，1667），属于英语修辞手法中的仿拟（Parody），意在说明几内亚蠕虫这一人体内的寄生虫已被根除，不再危害人类。仿拟是指为了使语言生动活泼、幽默诙谐，有意仿照人们现成的语言材料，根据表达的需要临时创造出新的词、语、句、或篇。如查尔斯·达尔文（Charles Darwin）的名言 survival of the fittest（适者生存）被奥斯卡·王尔德（Oscar Wilde）改换为 the survival of the vulgarest（最庸俗者生存），对现代新闻业予以嘲讽。

2 **exterminate** /ɪkˈstɜːmɪneɪt/ *vt.* 消灭，根绝

3 **blister** /ˈblɪstə(r)/ *n.* 水疱

4 **pop out:** 突出，弹出

5 **paralysis** /pəˈræləsɪs/ *n.*【医】麻痹（症），瘫痪（症）

6 **lethal** /ˈliːθl/ *adj.* 致死的，能致命的

7 **unscathed** /ʌnˈskeɪðd/ *adj.* 未受损伤的

8 **guinea worm:**【医】几内亚龙线虫，也被称为麦地那龙线虫（medina worm）或龙线虫（dragon worm），是亚洲和非洲热带地区一种常见的人体寄生虫。

9 **Dracunculus** /drəˈkʌŋkjuləs/ *n.*【医】龙线属

the closest living equivalent to the monsters in the Alien movies—except we're beating this enemy. Guinea worm was once widespread in Africa, the Middle East and many parts of Asia. In 1986, there were nearly 4 million cases a year in 20 countries across south Asia and Africa. Last year, there were just 3,142 in four countries in Africa. The worm could be extinct by 2012, making dracunculiasis[1] the second human disease ever to be eradicated[2]—the first being smallpox[3].

Guinea worms start out as minuscule[4] larvae[5] living inside water fleas of the genus Cyclops[6]. These millimetre-long crustaceans[7] live in stagnant[8] water, and people can swallow them when they drink from ponds, ditches or shallow wells. Stomach acids dissolve the water fleas but can leave the larvae untouched. The free larvae then burrow[9] out of the intestine[10] and cross to the chest or abdominal wall, where the male and female worms mature and mate. The males eventually die, but the growing females tunnel[11] imperceptibly[12] to, and then under, the skin.

Even as the females grow up to a metre long, their hosts remain unaware of their presence. The worms prevent pain by

---

1 **dracunculiasis** /drəˌkʌŋkjuˈlaɪəsɪs/ *n.*【医】麦地那龙线虫病
2 **eradicate** /ɪˈrædɪkeɪt/ *vt.* 根除，根绝
3 **smallpox** /ˈsmɔːlpɒks/ *n.*【医】天花
4 **minuscule** /ˈmɪnəskjuːl/ *adj.* 极小的，微小的
5 **larva** /ˈlɑːvə/ *n.*（*pl. larvae*）【动】幼虫
6 **genus Cyclops:**【动】剑水蚤（淡水浮游动物中的重要类群之一）
7 **crustacean** /krʌˈsteɪʃn/ *n.*【动】甲壳纲动物
8 **stagnant** /ˈstægnənt/ *adj.* 不流动的，污浊的
9 **burrow** /ˈbʌrəʊ/ *v.* 掘，打洞
10 **intestine** /ɪnˈtestɪn/ *n.* 肠
11 **tunnel** /ˈtʌnl/ *v.* 挖掘
12 **imperceptibly** /ˌɪmpəˈseptəbli/ *adv.* 察觉不到地