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美国广播英语

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库存书

每日科技报道

DAILY SCIENCE REPORT

上海译文出版社

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李铭才 吴光华
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上海译文出版社出版
上海延安中路 955 弄 14 号
新华书店上海发行所发行
江苏南漕印刷厂印刷

开本 787×1092 1/32 印张 2.5 字数 56,000
1983 年 5 月第 1 版 1983 年 5 月第 1 次印刷
印数: 1-14,700 册

书号: 9188·183 定价: (六)0.22 元

说 明

《美国广播英语》系根据美国之音特别英语节目每日科技报道的录音选编而成。

每日科技报道内容广泛,涉及天文地理、理工农医各科,着重介绍科普知识和科技新成就;文笔简炼生动,叙述深入浅出,词汇大量复现,语音标准,朗读优美。

本辑共选12篇科技报道,内容有中国大熊猫、动物的语言、地球气温、地震预报、南极探险、生理卫生等。

本辑有些篇目分上下两篇,或上中下三篇,与第二辑有关篇目配合。各篇标题系编者所加,并编有生词、注释、理解性问题及参考译文,适合我国大学各专业学生及科技人员学习美国英语使用。

本辑备有盒式录音带一盒,直接收录自当天美国之音广播,有时有杂声干扰,但不影响英语学习。本书录音带由上海音乐书店特约经销。

本辑由方兆敏老师、罗灿文副教授审校。

编写过程中承美国之音科技报道编辑 Laszlo Dosa 先生和 Jack Huizenga 先生分别来信解释了某些文句,并承我院美籍教师 Marjorie Francisco 夫人审阅审听了全稿,特此致谢。

大连铁道学院外语教研室

一九八二年五月

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1. Chinese Giant Pandas Abroad (2)

The National Zoo in Washington now has three giant pandas: two of its own, and one on loan from the London Zoo. The London panda is a male named Jiajia. He was sent to Washington last week in the hope that he will mate with the female panda named Lingling.

Lingling and Washington's male panda Xingxing, have had trouble attempting to mate. Zoo keepers think that she and Jiajia will be more successful.

Jiajia will be kept inside, in a room by himself for a while. This is to protect him from becoming sick and from spreading germs to the other pandas.¹ However, visitors to the National Zoo can now watch him through a large window.

Giant pandas have been exchanged for mating a few times before. In the late 1960's, for example, a female panda from the London Zoo was sent to a male at the Moscow Zoo. Their mating attempt failed. The male was later sent from Moscow to London, but the attempt failed again.

Only one giant panda has been born in captivity outside China. It was born last summer in the zoo in Mexico City. However, the mother panda accidentally sat on her baby and crushed it nine days after it was

born.

Giant pandas once lived in many parts of Asia. Today they are found in only three provinces in China. Most are in the mountain areas of Sichuan Province.

Animal experts say it appears that as much as 25 per cent of the giant panda population has died. They believe that fewer than one thousand of these rare animals remain on earth.

The spread of towns and farms probably is the major reason why there are fewer pandas today. But there are other reasons. Many giant pandas died because they could no longer find the kinds of bamboo that provided most of their food. Two kinds, for example, are the umbrella and the fountain bamboo. They produce flowers only once at the end of their one-hundred-year life. Within a few months the bamboo plants die, leaving only the seeds from the flowers. The seeds grow into new bamboo plants. But it takes several years for the new plants to grow large enough to provide food for the giant pandas.

A number of steps have been taken to help save the giant panda. The People's Republic of China has set aside 30,000 square kilometers of land as a protected area for pandas. It also plans to establish a panda research center in Sichuan Province. China will spend four and one half million dollars for the project. Another one million dollars is expected to come from an international save-the-panda campaign.²

The World Wild Life Fund says it would like to use part of this money to put radio devices on some wild pandas. It hopes to learn where the pandas go, which

ones raise the young, and how long they stay together.

— Chris Johnson

1981.3.12.

New Words and Phrases

loan [ləʊn] <i>n., v.</i>	贷款; 借出	fountain ['faʊntɪn] <i>n.</i>	
on loan	租借		泉水, 喷泉
for a while	一会儿, 暂时	seed <i>n.</i>	种子
germ [dʒɜ:m] <i>n.</i>	微生物, 细菌	set aside	单独开辟, 放在一边
captivity [kæp'tɪvɪti] <i>n.</i>		province ['prɒvɪns] <i>n.</i>	省
	监禁, 俘获	campaign [kæm'peɪn] <i>n.</i>	
accidentally [,æksɪ'dentli] <i>ad.</i>			战役; 运动
	偶然地, 意外地	fund <i>n.</i>	资金, 基金(机构)
crush <i>v.</i>	压碎, 压倒	The World Wild Life Fund	
rare [reə] <i>a.</i>	稀少的, 稀有的		世界野生生物基金会
bamboo [bæm'bu:] <i>n.</i>	竹	raise <i>v.</i>	提高, 饲养, 种植
umbrella [ʌm'brelə] <i>n.</i>	雨伞		

Notes

1. This is to protect him from becoming sick and from spreading germs to the other pandas.

这是为了防止它生病, 防止它把细菌传给别的熊猫。

- 1) protect A from + 现在分词 (-ing): 保护 A 免遭..., 防止 A...

类似的用法还有: prevent A from -ing 防止 A...

stop A from -ing 阻止 A...

free A from -ing 使 A 免于(摆脱)...

- 2) 本句谓语部分含有“be + 动词不定式”结构, 表示按计划、安排或约定将要进行或必须进行的行为。如:

We are to leave at eight this evening.

我们定于今晚八点离开。

The workpiece is to be machined on the grinding machine.

该工件必须在磨床上加工。

2. Another one million dollars is expected to come from an international save-the-panda campaign.

还可指望从国际拯救熊猫运动机构获取另外一百万美元。

1) expect (指望, 预计) 用作被动语态时, 要跟主语补足语, 句中 to come 到句尾的不定式短语即为主语补足语。

2) save-the-panda 为复合词, 作 campaign 的定语。

现代英语中往往用一个词组甚至一个句子临时构成一个复合词, 用来修饰另一个名词。如下一句中的 "All is well" 作 message 的定语。

The hen's clucking "All is well" message caused the unborn chicks to make their pleasure sounds.

母鸡咯咯咯的“一切良好”的信息使得未孵出的雏鸡发出喜悦的叫声。

Comprehension

1. What are the names for three giant pandas now at the National Zoo in Washington?

Why was the London panda sent to Washington?

2. Why will Jiajia be kept in a room by himself for a while?

3. Have giant pandas been exchanged before? Why?

4. How many giant pandas have been born in captivity outside China?

5. Where can we find wild giant pandas now?

How many giant pandas remain on earth?

6. Please explain why there are fewer pandas today?

7. What kind of plant provides most of the pandas' food?

8. What are some steps which have been taken in China to help save the giant pandas?
9. Tell the reason why the animal experts would put radio devices on some wild pandas.

参 考 译 文

中国熊猫在国外(二)

华盛顿国立动物园现在已有了三头大熊猫，两头是它自己的，一头是从伦敦动物园借来的。伦敦来的这头熊猫是公的，叫佳佳。它上周被送来华盛顿，希望它将与一头名字叫玲玲的雌熊猫交配。

玲玲与华盛顿的一头公熊猫兴兴试图交配时遇到了困难。动物园管理人员认为，它与佳佳交配成功的希望较大。

佳佳将单独临时关在一间屋内，这是为了防止它生病，防止它把细菌传给其他熊猫。但是，来到国立动物园的参观者现在仍可通过一个大窗户观赏它。

以前，为了交配，大熊猫曾经交换过几次。例如，六十年代后期，伦敦一头雌熊猫曾被运到莫斯科动物园与一头公熊猫配偶，他们的交配尝试失败了。后来这头公熊猫从莫斯科运到伦敦，但是，他们的尝试又一次失败了。

在中国国外，只有一头大熊猫在监禁中诞生，它于去年夏天诞生于墨西哥城的动物园，但是，它的母亲意外地踩上了它，在它出生之后九天就被压死了。

大熊猫曾经在亚洲许多地区生存过，现在只能在中国的三个省内看到它们，大多数生活在四川省山区。

动物专家说，似乎百分之二十五的大熊猫已经死亡。他们认为，这些稀有动物只有不到一千头还存活在世界上。

城镇和农庄的扩大可能是现在熊猫减少的原因，但是还有其他原因。许多大熊猫的死亡原因是因为它们再也找不到为他们提供主要食物的那种竹笋。例如，有两种是伞形竹笋和泉水竹笋。这两种竹笋只在它们一百年生命的最后才开一次花。几个月内，竹笋就死亡，花上只留下种子。种子长成新竹笋，但是要花几年时间才能长大到足以大熊猫提供食物。

已经采取了一些措施来拯救大熊猫。中华人民共和国已划出三万平方公里的土地作为熊猫保护区，还计划在四川省建立熊猫研究中心。为此，中国将花费四百五十万美元的资金。还可指望从国际拯救熊猫运动组织获取另外一百万美元。

世界野生生物基金会说，它将把其中一笔资金用于把无线电装置安装在一些野生熊猫身上。它想了解熊猫的去向、哪些熊猫养育后代、它们在一起相处多久。

——克里斯·约翰逊

1981.3.12.

2. Flash-light Fish

Many creatures that live in darkness can release light from their bodies. This is true of many insects that search for food during the night.¹ It also is common among fish that live deep in the ocean where it is always dark².

Scientists are not sure why these creatures produce light. Some experts believe the lights may be a form of communication. Others say the light protects the creatures from enemies.

Scientists are even less sure how the light is produced. In the United States scientists at several ocean research centers in California are searching for answers by studying different kinds of so called flash-light fish. These fish produce a green-colored light from a large organ beneath each eye. A loose piece of skin acts like an eye-lid, covering or uncovering the light-producing organ.

Dr Edward Miller of the Steinhart Aquarium in San Francisco believes the fish turn their lights on and off to communicate with other flash-light fish. He says they also turn on the light to protect themselves against attackers.

Dr Miller notes that the sudden flash of light in the darkness of the deep ocean can temporarily blind an attacker, permitting the flash-light fish to flee.

Dr Miller and other scientists have learned that the light is produced by bacteria that live in the fish's light

organs. They do not understand, however, exactly how the bacteria produce light.

One scientist, Kenneth Neilson of the Scripps's Oceanographic Institute, says the fish seem to control the light by controlling the amount of oxygen in the light organs. Dr. Neilson made the discovery after studying the light organs of the Japanese night-fish, a member of the flash-light fish family. He found that the light organs contain a great many tiny tubes. These carry sugar and other food that the bacteria need to survive. The bacteria eat the food, then release waste products.

Dr Neilson says cells in the light organs use oxygen and the bacteria's waste products to control the amount of light the bacteria produce. The amount of light seems to depend on the amount of oxygen. He says that the less oxygen present, the brighter the light³.

The American scientist found that the cells in the light organ also control reproduction of the bacteria. He says this guarantees that there are not more bacteria than the fish can support.

Dr Neilson notes that the bacteria are different in each kind of flash-light fish, and he says each seems to produce light in a different way. As a result, he says, his findings on how the Japanese night-fish produces light may not be true for other kinds of flash-light fish.

Dr Neilson says he was successful in learning about the night-fish bacteria because it is the only light-producing bacteria scientists have been able to keep alive in a laboratory.

— *Bill Rodgers*
1982.1.25.

New Words and Phrases

flash-light fish 闪光鱼, 发光鱼

organ ['ɔ:gən] *n.* 器官; 机构

lid *n.* 盖; 眼睑

eyelid *n.* 眼睑

aquarium [ə'kwɛəriəm] *n.*

水族馆; 养鱼缸

San Francisco

['sæn frən'siskəu] *n.* (美国港

市) 圣弗兰西斯科 (即旧金山或

三藩市)

temporarily ['tempərəri:,

tempə'rerili] *ad.* 暂时, 临时

attacker [ə'tækə] *n.* 进攻者

flee *v.* 逃走; 消散

oceanographic

[,əʊʃjənəu'græfik] *a.* 海洋学的

oceanographic institute

海洋学院, 海洋研究所

guarantee [ˌgærən'ti:] *v., n.*

保证, 担保

Notes

1. This is true of many insects that search for food during the night.

许多昆虫晚间寻找食物时也是这样(也能发光)。

1) search for: 寻找。

2) true of (或 for) ...: 对...也一样(也成立, 也适用)。

再如本文另外一句:

... his findings on how the Japanese night-fish produces light may not be true for other kinds of flash-light fish.

…… 他的那些有关日本夜光鱼的发现可能不适用于其他种类的闪光鱼。

2. ... live deep in the ocean where it is always dark.

…… 居住在永远是黑暗的海洋深处。

句中 deep 为副词, 作状语, 修饰 in the ocean. where 引出的定语从句说明 the ocean, 其中 it 为无人称代词, 指天气、时

间、季节等。

3. ... the less oxygen (is) present, the brighter (is) the light.

...氧气量越少，光就越亮。

这是个“the+ 比较级, the+ 比较级”句型。两句中的谓语动词 is 均被省略。

Comprehension

1. What is common among the creatures living in darkness and insects searching for food during the night ?
2. Are scientists sure how and why they produce light ?
3. What color is the flash-fish's light ? Where is it produced ?
4. How did Dr Miller in San Francisco explain why the fish turn their lights on and off ?
5. How is the light produced, according to Dr Miller ?
6. How can the fish control their light ?
What produces the light in the light organ ?
7. What else do the cells in the light organs do ?
8. Why does each kind of flash-light fish produce light in a different way ?

参 考 译 文

闪 光 鱼

许多在黑暗中生活的生物都能从其身体上发出光来。许多昆虫晚间寻找食物时也能发光。这种现象对于居住在永远是黑暗的海洋深处的鱼类也是很常见的。

科学家们并不确知这些生物发光的原因。有些科学家认

为，这种光可能是一种交际形式；另一些科学家则说，这种光可保护这些生物免受敌人的侵袭。

科学家们更不清楚这种光是如何产生的。美国加利福尼亚几个海洋研究中心的科学家们，正在通过研究几种不同的称之为闪光鱼的鱼来寻找解决这个问题的答案。这些鱼从其每只眼睛下方的一个大器官中发出绿色光线。有一片松弛的皮起着眼睑的作用，启盖着这个发光器官。

旧金山斯坦哈特水族馆的爱德华·米勒博士认为这种鱼闪烁其光芒是为了同别的闪光鱼进行交际。他说，这种鱼闪出光来也是为了保护它们自己免遭进攻者的袭击。

米勒博士说，漆黑深海中的突然闪光，会使进攻者双眼暂时失明，从而使闪光鱼逃之夭夭。

米勒博士和别的科学家已经知道，这种闪光是由生存在闪光鱼的发光器官里的细菌产生的。然而他们并不确切懂得细菌是怎么产生光的。

斯克里浦海洋学院的一位科学家肯尼思·纽尔逊说，这种鱼似乎是通过控制其发光器官中的含氧量来控制发光的。纽尔逊博士在研究了日本夜光鱼——闪光鱼属中的一种——的发光器官之后发现了这一点。他发现，发光器官中有许许多多微小的管子，这些管子输送细菌生存所必需的糖份和其他食物；细菌吃下食物，然后排出废料。

纽尔逊博士说，发光器官中的细胞利用氧气和细菌排出的废料来控制细菌产生的光。光的量似乎取决于氧气量。他说，氧气量越少，光就越亮。

这位美国科学家发现，发光器官中的细胞还控制细菌的繁殖。他说，这可确保发光器官中的细菌不多于闪光鱼所能

供养的数目。

纽尔逊博士指出，每种闪光鱼中的细菌是不同的，他还说，似乎每种都用不同的方式发光。结果是，他说，他的那些关于日本夜光鱼的发现，可能不适用于别的种类的闪光鱼。

纽尔逊博士说，他之所以能成功地了解闪光鱼的细菌是因为这种细菌是科学家能使之存活于实验室的唯一的发光细菌。

——比尔·罗杰斯

1982.1.25.