

TPO 47 – 1 Roman Cultural Influence on Britain  
 罗马文化对英国的影响

After the Roman Empire's **conquest**\* of Britain **in the first century A.D.**, the presence of **administrators, merchants**, and **troops** on British soil, along with the **natural flow**<sup>3</sup> of **ideas and goods**<sup>2</sup> from the rest of the empire<sup>1</sup>, had an **enormous** influence on life in the British **Isles**. Cultural influences **were of** three types: the bringing of objects, the transfer of craft workers, and the introduction of **massive civil** architecture. Many objects **were not art in even the broadest sense** and **comprised utilitarian**\* items of clothing, **utensils**, and equipment. We should not **underestimate** the social status associated with such **mundane**<sup>1</sup> **possessions**<sup>2</sup> which had not previously been available. The flooding of Britain **with red-gloss pottery from Gaul** (modern-day France), decorated with scenes from Classical mythology, probably brought many into contact with **the styles and artistic concepts of the Greco-Roman world** for the first time, **whether or not the symbolism** was understood. Mass-produced goods were accompanied by fewer more **aesthetically** impressive objects such as **statuettes**. Such pieces perhaps first came with officials for their own **religious worship**; others were then acquired by native leaders as **diplomatic** <sup>adj.</sup> gifts or by purchase. Once seen by the natives, such objects created a fashion which rapidly spread through the province.

<b>mundane</b> <sup>1</sup> 英 [mʌn'deɪn] 美 [mʌn'deɪn] adj. 世俗的, 平凡的; 世界的, 宇宙的	<b>religious worship</b> 宗教崇拜
<b>possessions</b> <sup>2</sup> 英 [pə'zeɪn] 美 [pə'zeɪn] n. 拥有; 财产; 领地; 自制; 着迷	<b>worship</b> 英 ['wɜ:ʃɪp] 美 ['wɜ:rʃɪp] n. 崇拜; 礼拜; 尊敬 vt. 崇拜; 尊敬; 爱慕 vi. 拜神; 做礼拜

在公元一世纪罗马帝国征服不列颠之后, **行政官员、商人和军队**在不列颠土地上的存在, 以及来自帝国其他地区的思想和商品的自然流动, 对不列颠岛屿上的生活产生巨大的影响。文化影响分为三种类型: 物品的引入、工艺师的迁移以及**宏大**行政建筑的引入。许多物品甚至按照最宽泛的广义都算不上是艺术品, 包括衣物、**餐具**、设备等**实用**\*<sup>adj.</sup>功能物品。我们不应该低估这些以前不可能获得的**世俗所有物**和社会身份地位之间的关系。来自高卢(现在的法国)的散发红色光泽的陶器大量涌入, 这些陶器饰以古典神话中的场景, 第一次让很多不列颠人接触到希腊罗马世界的风格和艺术观念, **不管他们是否能够理解其象征意义**。伴随大规模生产商品的还有少数审美上更令人印象深刻的物品, 例如**微型雕像**。大部分这些微型雕像也许是官员们携带来的, 这些官员用它们进行宗教活动。其他的微型雕像是通过本地领导人接受**外交** <sup>adj.</sup>馈赠或购买所获得。一旦被当地人看到, 这样的物品就成为时尚, 在整个不列颠省迅速蔓延。

In the most extreme instances, natives **literally**\* bought the whole package of Roman culture. The Fishbourne villa, built in the third quarter of the first century A.D., probably for the native

**批注 | 1: Britain**  
 英 ['brɪtn] 美 ['brɪtn]  
 •n. 英国; 不列颠  
 Briton  
 n. 英国人; 大不列颠人

**批注 | 2: conquest\***  
 •n. 征服, 战胜; 战利品  
 conquer  
 •vt. 战胜, 征服; 攻克, 攻取  
 •vi. 胜利; 得胜

**批注 | 3: Isle**  
 [aɪl]  
 •n. 岛  
 •vt. 使成为岛屿  
 •vi. 住在岛屿上

**批注 | 4: be of**  
 •内容; 具有.....性质

**批注 | 5: civil**  
 •adj. 公民的; 民间的; 文职的; 有礼貌的; 根据民法的

**批注 | 6: symbolism**  
 英 ['sɪmbəlɪzəm] 美 ['sɪmbəlɪzəm]  
 •n. 象征, 象征主义; 符号论; 记号

**批注 | 7: aesthetically**  
 英 [i:'θetɪkli; es'θetɪkli]  
 i] 美 [es'θetɪkli]  
 •adv. 审美地; 美学观点上地

**批注 | 8: literally\***  
 英 ['lɪtərəli] 美 ['lɪtərəli]  
 •adv. 照字面地; 逐字地; 不夸张地; 正确地; 简直

client king Cogidubnus, **amply**\*adv. illustrates his Roman **pretensions**\*. It was constructed in the latest Italian style with imported **marbles** and **stylish** mosaics. It was **lavishly**\* furnished with imported sculptures and other Classical objects. A visitor from Rome would have recognized its owner as a **participant** in the **contemporary**\* culture of the empire, not at all **provincial** in taste. Even if those *from the traditional families* looked down on him, they would have been unable to dismiss him as uncultured. Although **exceptional**\* adj., this demonstrates how new cultural symbols bound provincials to the **identity** of the Roman world.

在最极端的情况下，当地人简直接受了一整套的罗马文化。Fishbourne 别墅，建于公元一世纪中后期，可能是为本地客户 Cogidubnus 国王建造的，**充分**\*adv.表明了他对罗马的**向往**。该建筑依据最新的意大利风格建造，用的是进口**大理石**和**时尚的**马赛克。它采用豪华进口雕塑和其他古典艺术品装饰。来自罗马的客人会将它的主人看作帝国当代文化的参与者，没有任何本省外乡人的气息。即使那些来自传统的家庭的人看不起他，他们也无法蔑视他为没有文化教养。虽然**异乎寻常** adj.，该案例表明新的文化符号是如何将本省居民和罗马世界的**身份**绑定起来的。

**Such examples** established a standard **to be copied**. One result was an **influx** of craft worker, particularly those skilled in artistic media like stone-carving which had not existed before the conquest. **Civilian** workers came mostly from Gaul and Germany. The magnificent temple built **beside the sacred spring at Bath** was constructed only about twenty years after the conquest. Its detail shows that it was carved by artists from northeast Gaul. In the absence of a tradition of Classical stone-carving and building, the desire to develop Roman **amenities**\* would have been difficult to fulfill. Administrators thus used their **personal contacts** to put the Britons in touch with architects and masons. As many of the officials in Britain had strong links with Gaul, it is not surprising that early Roman Britain **owes** much **to** craft workers from that area. Local workshops did develop and **stylistically** similar groups of sculpture show how skills in this new medium became widespread. **Likewise**, skills in the use of mosaic, wall painting, **ceramic** decoration, and metal-working developed throughout the province with the **eventual** emergence of **characteristically** Romano-British styles.

这样的例子建立了一个学习模仿的标准。一个结果就是大量的工艺师的**流入**，尤其是那些有艺术材料技能的，如石头雕刻手艺的工匠，这样的手艺在罗马征服前是没有的。**民间的**工艺师大都来自高卢和德国。巴斯城**圣**泉旁建造的宏伟庙宇，是在征服后仅仅二十年左右就建造的。它的细节说明它是由东北高卢艺术家雕刻的。在缺乏石材雕刻和建筑传统的情况下，开发罗马化**设施**的欲望本来是很难满足的。因此，官员们运用他们的**私人关系**让英国人接触外来的建筑师和石匠。因为许多英国官员与高卢联系紧密，早期罗马化不列颠要**归功于**来自那个地区的工艺师就不足为奇了。当地的手工作坊发展了，风格类似的雕塑群表明这一新媒体技术已经变得如何普遍。同样的，使用马赛克、壁画、**陶瓷**装饰和金属加工的技巧也在整个省区得到发展，**典型** adv.的罗马英国风格最终形成了。

This art had a major impact on the native peoples, and one of the most important factors was a change in the scale of buildings. Pre-Roman Britain was highly **localized**, with people

批注 [ 9]: pretension\*  
•n. 自负；要求；**主张**；借口；  
骄傲

批注 [ 10]: lavishly  
英 ['lævɪʃli] 美 ['lævɪʃli]  
•adv. 丰富地；浪费地

批注 [ 11]: contemporary\*  
•adj. 发生（属）于同时期的；  
**当代的**  
•n. 同代人，同龄人；同时期的  
东西

批注 [ 12]: provincial  
英 [prə'vɪnʃl] 美 [prə'vɪnʃl]  
•adj. 省的；地方性的；偏狭的  
•n. 粗野的人；**乡下人**；外地人

批注 [ 13]: Civilian  
[sə'vɪliən]  
•n. 平民，百姓  
•adj. 民用的，百姓的，平民的

批注 [ 14]: amenity\*  
•n. 舒适；礼仪；愉快；**便利设施**

批注 [ 15]: ceramic  
•adj. 陶瓷的；陶器的；制陶艺术的  
•n. 陶瓷；陶瓷制品

批注 [ 16]: eventual  
英 [ɪ'ventʃuəl] 美 [ɪ'ventʃuəl]  
•adj. 最终的；有条件的

rarely traveling beyond their own region. **On occasion** large groups **amassed** <sup>vt.</sup> for war or religious festivals, but society remained centered on small communities. Architecture of this era reflected this with even the largest of the **fortified**<sup>3</sup> towns and hill **forts**<sup>1</sup> containing **no more than** clusters of medium-sized structures. The spaces inside even the largest roundhouses were modest, and the use of rounded shapes and organic building materials gave buildings a human scale. But the effect of Roman **civil** architecture was significant. The **sheer** size of space enclosed within buildings like the basilica of London must have been astonishing. This was an architecture of **dominance**<sup>4</sup> in which subject peoples were **literally** made to feel small by buildings that **epitomized**<sup>5</sup> **imperial**<sup>6</sup> power. **Supremacy** was **accentuated** by the **unyielding** straight lines of both individual buildings and planned settlements since these too **provided a marked contrast with** the natural **curvilinear** shapes dominant in the native realm.

<p><b>fort</b><sup>1</sup> 英 [fɔ:t] 美 [fɔ:rt] n. 堡垒; 要塞; (美) 边界贸易站 vt. 设要塞保卫 vi. 构筑要塞</p>	<p><b>fortify</b><sup>2</sup> 英 ['fɔ:tɪfaɪ] 美 ['fɔ:rtɪfaɪ] vt. 加强; 增强; (酒) 的酒精含量; 设防于 vi. 筑防御工事</p>	<p><b>fortified</b><sup>3</sup> 英 美 adj. 加强的; 防御的; 增加营养的; 增加酒精含量的 v. 筑防御工事于…… (fortify 的过去式和过去分词)</p>
<p><b>dominance</b><sup>4</sup> 英 ['dɒmɪnəns] 美 ['dɑ:mɪnəns] n. 优势; 统治; 支配</p>	<p><b>epitomize</b><sup>5</sup> 英 [ɪ'pɪtəmaɪz] 美 [ɪ'pɪtəmaɪz] vt. 摘要; 概括; 成为…的缩影</p>	<p><b>imperial</b><sup>6</sup> 英 [ɪm'pɪəriəl] 美 [ɪm'pɪriəl] adj. 帝国的; 皇帝的; 至高无上的; 威严的 n. 纸张尺寸; 特等品</p>

这种艺术对当地居民有着重大的影响, 其中最重要的因素之一是建筑规模的变化。前罗马时代的英国是高度**本地化的**, 很少有人旅行到自己的地区以外。**有时候**, 会有大群的人为了战争或者宗教节日而**聚集** <sup>vt.</sup>, 但社会生活仍然以小社区为中心。这个时代的建筑反映了这个特点, 即使最大的**设防城镇**和**山地城堡**所包含的也不过是几个中型建筑的聚集。即使最大的圆形碉楼里的空间也是不大的, 圆形和有机建筑材料的使用赋予建筑平易近人的规模。但罗马行政建筑具有宏大的效果。建筑所封闭的**绝对**空间尺寸肯定让当时的人们叹为观止, 例如伦敦的方形教堂。这是一种**统治** <sup>n.</sup>建筑, 让臣民在体现帝国权力的建筑中切实感觉到自己的渺小。至高无上感被单个建筑和规划的定居点的笔直线条所加强, 因为这些都**与本土自然曲线形状形成鲜明的对比**。

批注 [ 17]: On occasion  
•有时; 偶尔

批注 [ 18]: 公民的; 民间的; 文职的; 有礼貌的; 根据民法的

批注 [ 19]: literally  
英 ['lɪtərəli] 美 ['lɪtərəli]  
•adv. 照字面地; 逐字地; 不夸张地; 正确地; 简直  
•adv. 确实地; 真正地; [口语] 差不多, 简直 (用于加强语气)

批注 [ 20]: supremacy  
[su:'preməsi]  
•n. 霸权; **至高无上**; 主权; 最高地位

**supreme**  
英 [su:'pri:m; sju:'pri:m] 美 [su:'pri:m]  
•adj. 最高的; 至高的; 最重要的  
•n. 至高; 霸权

批注 [ 21]: accentuate  
英 [ək'sentʃueɪt] 美 [ək'sentʃueɪt]  
•vt. 强调; 重读

批注 [ 22]: unyielding  
英 [ʌn'ji:lɪŋ] 美 [ʌn'ji:lɪŋ]  
•adj. 不屈的; 坚强的; [材] 不易弯曲的

批注 [ 23]: curvilinear  
英 [kɜ:'vɪ'lɪniər] 美 [kɜ:'rvi'lɪniər]  
•adj. 曲线的; 由曲线组成的 (等于 curvilinear)

## TPO 47 – 2 Termite Ingenuity 白蚁的天赋

Termites, social insects which live in colonies that, in some species, contain 2 million individuals or more, are often incorrectly referred to as white ants. But they are certainly not ants. Termites, unlike ants, have gradual metamorphosis with only three life stages: egg, nymph, and adult. Ants and the other social members of their order, certain bees and wasps, have complete metamorphosis in four life stages; egg, larva, pupa, and adult. The worker and soldier castes of social ants, bees, and wasps consist of only females, all daughters of a single queen that mated soon after she matured and thereafter never mated again. The worker and soldier castes of termites consist of both males and females, and the queen lives permanently with a male consort.

白蚁是群居昆虫，有些种类的白蚁会生活在包含 200 万个或更多个体的群体中，他们通常被错误地称为白蚁。但它们肯定不是蚂蚁。白蚁，不像蚂蚁，它的渐变态只有三个生活期：卵、幼虫、成虫。蚂蚁和其他同种类的群居虫类（某些蜜蜂和黄蜂），有着四个生命阶段的完全变态，卵、幼虫、蛹和成虫。群居蚂蚁、蜜蜂和黄蜂的职蚁和兵蚁的构成中都只有雌性，一个女王所有的女儿在成年后马上交配，并且在那以后不会再次交配。白蚁的职蚁和兵蚁既有雄性也有雌性，并且女王将永远和一个雄性配偶生活在一起。

Since termites are small and soft-bodied, they easily become desiccated and must live in moist places with a high relative humidity. They do best when the relative humidity in their nest is above 96 percent and the temperature is fairly high, an optimum of about 79°F for temperate zone species and about 86°F for tropical species. Subterranean termites, the destructive species that occurs commonly throughout the eastern United States, attain these conditions by nesting in moist soil that is in contact with wood, their only food. The surrounding soil keeps the nest moist and tends to keep the temperature at a more or less favorable level. When it is cold in winter, subterranean termites move to burrows below the frost line.

由于白蚁是小的软体动物，他们很容易变得干燥，必须生活在有较高相对湿度的潮湿的地方。当它们的巢的相对湿度在百分之 96 以上且温度较高时（对于温带物种的理想温度是 79° F，对于热带是 86° F），他们感到最适宜。地下白蚁是一种常出现在美国东部的破坏性的物种，通过在潮湿的土壤中筑巢获得达到这种（环境）条件，这些土壤和木头有接触，木头是它们唯一的食物，以达到这些条件。周围的土壤保持巢的潮湿，易于将温度保持在有利水平。在冬天冷的时候，白蚁搬到霜冻线以下的洞穴。

Some tropical termites are more ingenious engineers, constructing huge above-ground nests with built-in "air conditioning" that keeps the nest moist, at a constant temperature, and well supplied with oxygen. Among the most architecturally advanced of these termites is an African species, *Macrotermes natalensis*. Renowned Swiss entomologist Martin Luscher described the mounds of this fungus-growing species as being as much as 16 feet tall, 16 feet in diameter at their base, and with a cement-like wall of soil mixed with termite saliva that

is from 16 to 23 inches thick. The thick and dense wall of the mound insulates the interior microclimate from the variations in humidity and temperature of the outside atmosphere. Several narrow and relatively thin-walled ridges on the outside of the mound extend from near its base almost to its top.

一些热带的白蚁是更聪明的工程师，用内置的“空调”建造巨大的地下巢穴，在一个恒定的温度，保持巢穴潮湿，以及提供氧气。在建筑上，最先进的白蚁是非洲的一个物种，*Macrotermes natalensis*。著名的瑞士昆虫学家 Martin Luscher 描述这种培菌白蚁的土墩高达 16 英尺，底部直径 16 英尺，有跟白蚁唾液混合的像水泥般的墙，从 16 到 23 英寸厚。厚密的墩壁将内部小气候与外界大气湿度和温度的变化隔绝。土墩外部几个狭窄且较薄壁的山脊几乎基从底部延伸到它的顶部。

According to Luscher, a medium-sized nest of *Macrotermes* has a population of about 2 million individuals. The metabolism of so many termites and of the fungus that they grow in their gardens as food helps keep the interior of the nest warm and supplies some moisture to the air in the nest. The termites saturate the atmosphere of the nest, bringing it to about 100 percent relative humidity, by carrying water up from the soil.

根据 Luscher, *Macrotermes* 的中型巢穴有大约 200 万种群个体。许多白蚁和他们在花园中培养作为食物的真菌的新陈代谢，有助于保持巢内的温暖，并为巢内的空气供应一些水分。白蚁使巢的大气饱和，将土壤的水分带上来，使巢穴达到约百分之 100 的相对湿度。

But how is this well-insulated nest ventilated? Its many occupants require over 250 quarts of oxygen (more than 1,200 quarts of air ) per day. How can so much oxygen diffuse through the thick walls of the mound? Even the pores in the wall are filled with water, which almost stops the diffusion of gases. The answer lies in the construction of the nest. The interior consists of a large central core in which the fungus is grown, below it is "cellar" of empty space, above it is an "attic" of empty space, and within the ridges on the outer wall of the nest, there are many small tunnels that connect the cellar and the attic. The warm air in the fungus gardens rises through the nest up to the attic. From the attic, the air passes into the tunnels in the ridges and flows back down to the cellar. Gases, mainly oxygen coming in and carbon dioxide going out, easily diffuse into or out of the ridges, since their walls are thin and their surface area is large because they protrude far out from the wall of the mound. Thus air that flows down into the cellar through the ridges is relatively rich in oxygen, and has lost much of its carbon dioxide. It supplies the nest's inhabitants with fresh oxygen as it rises through the fungus-growing area back up to the attic.

但是，这种绝缘超好的巢穴如何通风？它的众多居住者每一天需要超过 250 夸脱的氧气（超过 1200 夸脱的空气）。如此多的氧气如何能通过土堆厚厚的墙壁的？即使在墙上的毛孔充满了水，几乎阻止了气体扩散。答案在于筑巢的构造。内部由一个巨大的中心核心组成，真菌在其中生长，下面是“地下室”空间，在它上面是一个“阁楼”空间，而在巢穴外墙的屋脊内有有许多连接地下室和阁楼的小隧道。花园里的温暖空气通过筑巢上升到阁楼。空气从阁楼上穿过屋脊，然后流向地下室。气体容易扩散进入或离开屋脊（主要进来氧气，排出二氧化碳），

因为它们壁薄、表面积大的（表面积大是因为他们远离墩墙突出）。因此，穿过屋脊流动下来到地窖的空气中氧气丰富，而且已经失去了大量的二氧化碳。当空气从真菌生长的地区上升到阁楼上，它为巢穴里的居民供应新鲜的氧气。

## TPO 47 – 3 Coral Reefs

### 珊瑚礁

An important environment that is more or less totally restricted to the intertropical zone is the coral reef. Coral reefs are found where the ocean water temperature is not less than 21 °C, where there is a firm substratum, and where the seawater is not rendered too dark by excessive amounts of river-borne sediment. They will not grow in very deep water, so a platform within 30 to 40 meters of the surface is a necessary prerequisite for their development. Their physical structure is dominated by the skeletons of corals, which are carnivorous animals living off zooplankton. However, in addition to corals there are enormous quantities of algae, some calcareous, which help to build the reefs. The size of reefs is variable. Some atolls are very large-Kwajelein in the Marshall Islands of the South Pacific is 120 kilometers long and as much as 24 kilometers across-but most are very much smaller, and rise only a few meters above the water. The 2,000 kilometer complex of reefs known as the Great Barrier Reef, which forms a gigantic natural breakwater off the northeast coast of Australia, is by far the greatest coral structure on Earth.

或多或少完全局限于热带的重要环境是珊瑚礁。珊瑚礁在水温不低于 21° C 的海洋中被发现，那里有坚实的底层，并且海水中不因为过量的河流沉积物而显得太暗。它们不会在深海里生长，所以一个有 30 到 40 米表面的地台是其发展的必要前提。它们的物理结构主要取决于珊瑚的骨骼，它们是以浮游动物为食的食肉动物。然而，除了珊瑚，还有大量的藻类帮助建立珊瑚礁（一些富含钙质的）。珊瑚礁的大小是多种多样的。一些环礁是非常巨大的一南太平洋的马绍尔群岛的 Kwajelein 有 120 公里长，24 公里宽一^但大多数都是非常小的，而伸出水面才几米。被称为大堡礁 2000 千米的珊瑚礁群，是迄今为止最大的珊瑚结构之一，它在澳大利亚东北海岸形成一个巨大的天然堤。

Coral reefs have fascinated scientists for almost 200 years, and some of the most pertinent observations of them were made in the 1830s by Charles Darwin on the voyage of the Beagle. He recognized that there were three major kinds: fringing reefs, barrier reefs, and atolls; and he saw that they were related to each other in a logical and gradational sequence. A fringing reef is one that lies close to the shore of some continent or island. Its surface forms an uneven and rather rough platform around the coast, about the level of low water, and its outer edge slopes downwards into the sea. Between the fringing reef and the land there is sometimes a small channel or lagoon. When the lagoon is wide and deep and the reef lies at some distance from the shore and rises from deep water it is called a barrier reef. An atoll is a reef in the form of a ring or horseshoe with a lagoon in the center.

珊瑚礁吸引了科学家将近 200 年，其中最相关的一些观察是由查尔斯达尔文在 1830 年 Beagle 航行中完成的。他认为，主要有三种（珊瑚礁）：岸礁、堡礁和环礁；他发现它们在一个逻辑等级序列上彼此相关。岸礁是一种靠近一些大陆或岛屿海岸的珊瑚礁。在海岸周围吗，它的表面形成了一个不平且粗糙的平台，差不多是低水位的高度，它的外边成坡向下进入大海。岸礁和土地之间有时有沟道道或环礁湖。当环礁湖又宽又深，并且暗礁离岸边有一些距离，并从从深水中升上来时，它被称为一个障碍礁。环礁是一个环形或马蹄形的礁，中间有一个环礁湖。

Darwin's theory was that the succession from one coral reef type to another could be achieved by the upward growth of coral from a sinking platform, and that there would be a progression from a fringing reef, through the barrier reef stage until, with the disappearance through subsidence (sinking) of the central island, only a reef-enclosed lagoon or atoll would survive. A long time after Darwin put forward this theory, some deep boreholes were drilled in the Pacific atolls in the 1950s. The drill holes passed through more than a thousand meters of coral before reaching the rock substratum of the ocean floor, and indicated that the coral had been growing upward for tens of millions of years as Earth's crust subsided at a rate of between 15 and 51 meters per million years. Darwin's theory was therefore proved basically correct. There are some submarine islands called guyots and seamounts, in which subsidence associated with sea-floor spreading has been too speedy for coral growth to keep up.

达尔文的理论是：从一个珊瑚礁类型到另一个类型的演替，可通过沉台珊瑚向上增长实现，从岸礁开始有一个的进展过程，经过堡礁阶段，在中央岛下沉消失后，只有被暗礁包围的泻湖或珊瑚礁会生存下来。在达尔文提出这一理论很长时间以后，在上世纪 50 年代，太平洋环礁上进行了一些深钻孔。在到达海底的岩石层之前，钻孔穿过超过一公里的珊瑚，这证明了当地沉淀率在 15~51 米百万年时，珊瑚已经向上增长了数千万年。达尔文的理论基本上是正确的。有一些海底岛屿被称为海山，其中沉降与海底扩张的速度有关，那里的（沉降速度）太快了，已经不能让珊瑚保持增长。

Like mangrove swamps, coral reefs are extremely important habitats. Their diversity of coral genera is greatest in the warm waters of the Indian Ocean and the western Pacific. Indeed, they have been called the marine version of the tropical rain forest, rivaling their terrestrial counterparts in both richness of species and biological productivity. They also have significance because they provide coastal protection, opportunities for recreation, and are potential sources of substances like medicinal drugs. At present they are coming under a variety of threats, of which two of the most important are dredging and the effects of increased siltation brought about by accelerated erosion from neighboring land areas.

像红树林沼泽，珊瑚礁是非常重要的栖息地。它们在印度洋和西太平洋的温暖水域中，珊瑚属的多样性是最大的。事实上，它们被称为热带雨林的海洋版，与它们陆地相对物在物种丰富度和生物生产力上相匹敌。它们同样有重要性，因为它们提供沿海保护、娱乐机会和潜在的物质来源（如药物）。目前它们正在各种各样的威胁下，其中最重要的两种是挖掘和由于附近海域加速侵蚀引起的增加的淤积。