

外研社·DK 英汉对照百科读物

INTERMEDIATE 中级

# 显微镜下

## UNDER THE MICROSCOPE

Mike Potter (英) 著



外语教学与研究出版社



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### Mite fright

This photograph shows eyelashes under a microscope. Some scientists think that 90% of adult humans have mites at the base of their eyelashes.

### 令人惊奇的螨虫

这张照片显示的是显微镜下的眼睫毛。一些科学家认为90%的成人的眼睫毛根部都有螨虫。



*I am a head louse and I am sucking blood from Christopher's head. Read about me on pages 4-11.*

我是一个头虱，正在克里斯托弗的头上吸血。关于我的一些事儿，请读第4-11页。

## It's a Bug's World

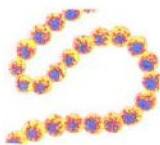
Look at the man lying on the bed. Well, let me introduce you to him. He's Christopher Maynard and we are his guests! He is a very generous host. He gives us a place to live, provides us with food, and keeps us warm.

Ah, but you don't know who we are, do you? Most of us are very small. If you want to see us, you'll have to find a microscope. We are the army of tiny creatures that live on, around, and even inside Christopher's body. Christopher is in bed because he isn't feeling well. We are the bugs, and his body is our world.

### 小虫子的世界

瞧瞧躺在床上那个人。好了，让我给你介绍一下他吧。他叫克里斯托弗·梅纳德，我们都是他的客人。他可是个非常慷慨的宿主。他给我们提供住处和食物，还不让我们挨冻。

对了，你还不知道我们是谁呢，对吧？我们的身体大多长得都很小。你要想看见我们，就得找架显微镜来。我们是一支小生物大军，生活在克里斯托弗的体表、四周，甚至于体内。克里斯托弗身体有些不舒服，所以在床上躺着。我们就是小虫子，他的身体就是我们的世界。



*Christopher is feeling terrible. That's because there are thousands of streptococci like me who are growing in his throat. You can read about us on pages 42-45.*

克里斯托弗感到非常难受。那是因为他的喉咙里生活着成千上万个和我一样的链球菌。你可以通过阅读第42-45页的内容来了解我。



His hair gives us a place to live. His skin gives us our food and we can also dig into his body. And we aren't the only bugs in the world! No! No! There are billions of us who don't live on Christopher... Well, just take a look at his dog. He doesn't look very happy, does he?

In this book you will see lots of photographs of us that were taken through a microscope. They show the tiny creatures that live on you and in the world around you. Now, you can actually meet us and read everything that you wanted, or didn't want, to know about us. And you will hear the story straight from the bug's mouth.

他的头发给我们提供了住的地方。他的皮肤给我们提供食物，我们还可以钻进他的身体内部。不过我们可不是世界上唯一的一群小虫子！不是！绝对不是！还有好几十亿只像我们这样的小虫子没有住在克里斯托弗身上……对了，就看看他的小狗吧。它看起来有点不高兴，对吧？

在这本书里，你会看到我们的很多张照片，都是通过显微镜拍下来的。照片上有很多小生物，它们就住在你的身上以及你周围的世界中。好了，你现在就可以见到我们了，可以通过阅读了解我们的一切，不管是你想知道的还是不想知道的，书里面都有。另外，你还会听到小虫子亲口讲的故事呢。

## Bacteria

Your body contains 100,000 billion – that's 100 trillion – bacteria. But don't try to count them – you will never be able to see them. They are too small.

## 细菌

你的身体上有 100 万亿个细菌！不过你可别去数，因为你根本就看不见它们。它们都特别的小。



*I am a dust mite. Millions of us are living in this duvet. We eat the little pieces of dead skin from Christopher's body. Read about me on pages 24–25.*

我是一只尘螨。我们当中有数百万只都生活在这床羽绒被上。我们吃克里斯托弗身上掉下来的死皮屑。我的事儿在第 24–25 页上。

*I am a flea. I've just bitten Christopher's dog. Read about me and my family on pages 12–19.*

我是一只跳蚤。刚刚叮过克里斯托弗的小狗。我和我家族的事儿写在第 12–19 页上。





### A world of lice

This body louse is a close relative of the head louse. Human head and body lice are only two of about 3,000 kinds of lice that scientists have found.

### 虱子的世界

这只体虱是头虱的近亲。人头虱和人体虱只是科学家们已经发现的3000种左右虱子当中的两种。



### Many hosts

Most mammals, and every kind of bird, provide a home to a single species of louse that lives on them and them only. Bats and whales are the only mammals with no lice.

### 众多的宿主

大多数哺乳动物以及各种鸟类都可以成为某种虱子的家园。而且某一种虱子只生活在某一种哺乳动物或鸟类身上。蝙蝠和鲸是唯一身上不生虱子的两种动物。

## Lice Story

I am a common head louse. Not just any kind of louse – a head louse. We are very particular about where we live. I, for example, can't just choose to live anywhere I want. I can only live in one place and one place only – the human head. That's why I'm called a head louse. We can't survive on pets, or birds, or other animals. We can only make our home on humans, and their hair is where we bring up our families.

I am sure that you have eaten one of those buns or rolls with small sesame seeds on them. Well, I am about the size of one of those seeds and am brownish-red in colour. So, you can just about see me, if you really look hard. But I am very difficult to find. I have six strong, curved legs at the front of my body, which I use to cling tightly to shafts of hair. I don't have any wings, so I can't fly, but I can move very fast when I need to.



Most of the time you will never see me. I know how to hide myself. If you wanted to find me you would have to look at the bottom of a shaft of one of your hairs where it is dark and warm. The best kind of home for me is long hair, where it isn't difficult to find a good place to hide. A bald head is like a desert to a head louse.

### 虱子的故事

我是一只普通的头虱。不过可不是一种一般的虱子——是头虱。我们住的地方很特别。就拿我来说吧，我可不能想住哪儿就住哪儿。我只住在一个地方，而且只能住在一个地方，那就是人的头上。这是为什么大家叫我头虱的缘故。我们在宠物、鸟类或其他动物身上都无法生存。我们只能在人的身上安家，人的头发就是我们家族生活繁衍的地方。

我收说你肯定吃过上面粘着芝麻粒儿的面包或点心卷。我的个头就跟芝麻粒儿大小差不多，身体是棕红色的。如果你用心去看，可能差不多就会看见我了。不过要找到我确实不太容易。我的身体前部长有六条弯曲强壮的腿，可以紧紧地抱住头发丝。我没有翅膀，不能飞，不过必要时我照样可以跑得快。



通常你根本不会见到我。我知道怎样把自己隐藏起来。你要想找到我就得一根一根地检查头发的根部，那地方既阴暗又暖和。我最理想的家是长头发，在那儿可以很容易找到藏身的好地方。秃头对头虱来说就像是片沙漠。



*The louse's six strong legs help it to cling tightly to human hair.*  
六条强壮的腿使虱子能够紧紧抱住人的头发。



### Old friends

Lice and humans have lived with each other for a very long time. The remains of lice were even found in the wrappings of ancient mummies.

### 老朋友

虱子和人共同生活已经很久很久了。甚至在木乃伊的裹尸布中都发现过虱子的尸体。



### Equal rights

For head lice, all humans are equal. It doesn't matter if people are rich or poor. They can all provide a very good home.

### 权力平等

对头虱来说，所有人都是平等的。是穷人还是富人都没有什么关系。他们都可以提供一个非常舒服的家。

When I feel hungry, I just crawl down the hair shaft to the warm scalp. It is the same as when you are feeling hungry and go to the refrigerator to have a quick snack. I push out the long parts of my mouth and make a tiny hole in the skin. Then I spit some saliva into the hole. This makes the blood flow more freely so I can drink it easily and quickly.

If I bit into your scalp, you would be able to feel the bite. You would probably want to scratch it. That's because human skin doesn't like my saliva. If you find that you are wanting to scratch your head all the time, it may be a sign that my friends and I have come to live on your head.

我感到饿了的时候就顺着头发丝爬到温暖的头皮上来。就像你饿了会到冰箱里去找快餐吃一样。我伸出长长的嘴，在皮肤上打一个小洞。然后我往洞里吐点儿唾液。这样可以使血液流得更加畅快，我喝起来就会又快又不费劲儿了。

我叮你的头皮时，你会感觉到我在叮咬你。你会觉得头皮发痒，想挠一挠。这是因为人的皮肤不喜欢我的唾液。如果你发现自己总想挠头的时候，这可能说明我和我的朋友们已经开始在你的头上安家了。



Shaft of human hair  
头发丝

The hooks on the front legs are just the right size to grip a human hair.

前腿上的钩子正好可以钩住人的一根头发。

Once I start to feed I never know when to stop. I just drink and drink. My whole body fills up with blood, and I soon begin to look like a balloon. When there is no more space inside me, my long mouth shrinks back into my head. But, you know, I will soon feel hungry again. In about three hours all that blood will disappear and I'll be ready for my next meal. I need about eight meals every day.

Can you imagine what would happen if I got caught in someone's comb, or if I fell into their hat? Where would I find my food? I would soon starve to death.

我一旦吃起来总是没完没了。我不停地吸了又吸。不久整个身体里面装满了血，就像是一只气球。当我的肚子里一点地方都没有了的时候，我的长嘴才会缩回到脑袋里。可是你瞧，过不了多会儿我的肚子就又饿了。我吸进肚子里的血经过三个小时左右的时间就会消失得无影无踪，我就得准备吃下一顿饭了。这样我每天需要吃大概八顿饭。

我要是在人家梳头的时候被梳子卡住，或者掉进人家的帽子里会出现什么样的结果呢？你能想像得出来吗？我到哪儿才能找到食物呢？过不了多久我就会被饿死。

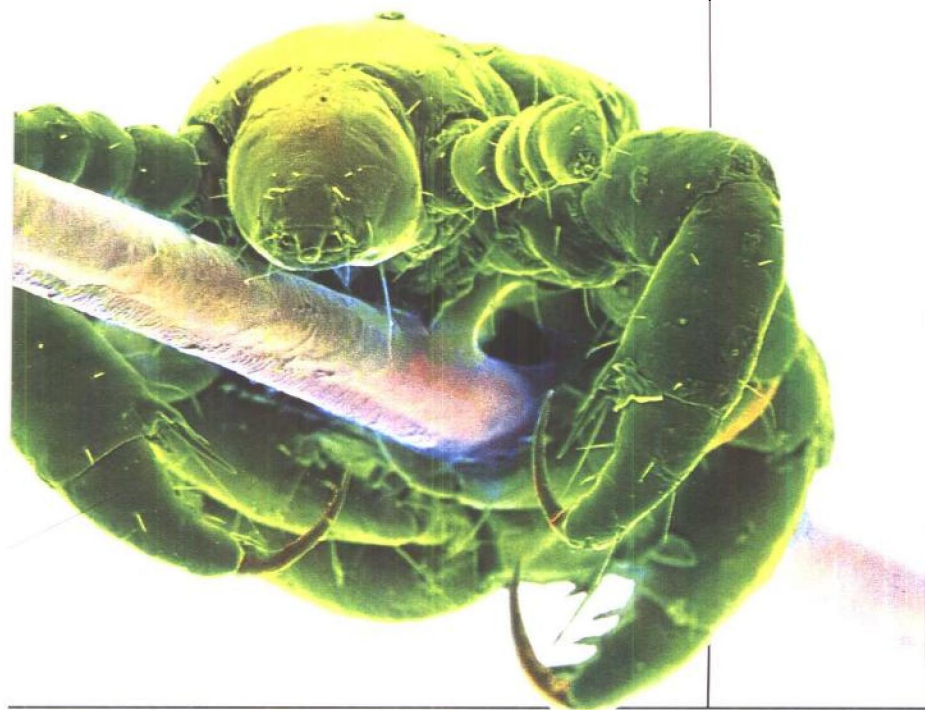


### Children beware!

Head lice are found more often on children than adults. This is because children's heads are checked more frequently.

### 孩子们要小心!

在孩子的头上找到头虱的机会要比大人多。这是因为经常有人来检查孩子的头发



### Lice girls

Female head lice develop quickly. They can start to lay their eggs when they are only eight or nine days old.

#### 虱子姑娘

雌性虱子发育得很快。她们只需长到八九天就可以开始产卵了。



### Big families

Like the old woman who lived in a shoe, a female louse has a huge family. She only lives for two or three weeks but in that time she lays about 100 eggs.

#### 庞大的家族

就像那个住在一只鞋里的老女人一样，一只雌性虱子也能建立起一个非常庞大的家族。她虽然只能活两三个星期，但是她在这一期间产下的卵却可以达到100只左右。

### Tiny babies

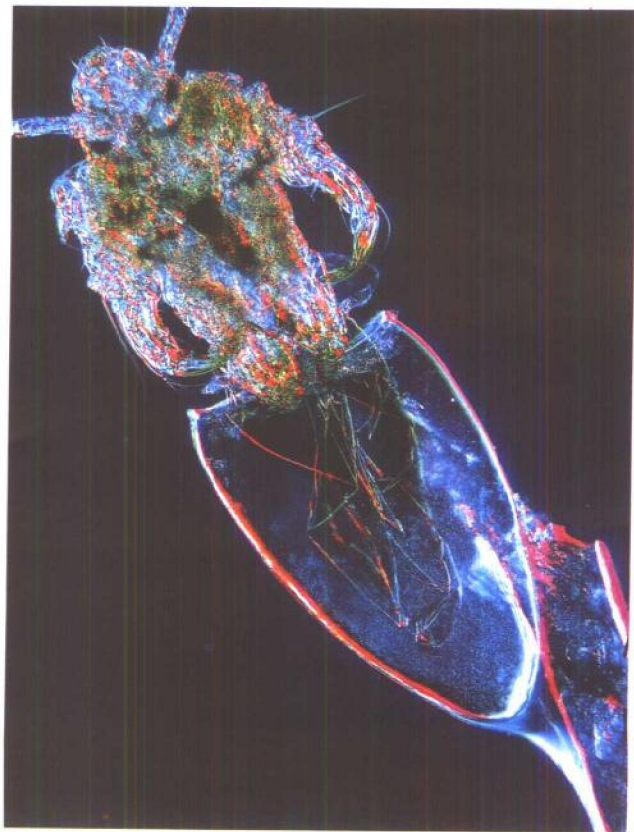
Nits are usually about one millimetre long. That's about the size of the head of a pin.

#### 小小宝贝

虱子通常只有一毫米长。它的个头和大头针的头部差不多大。

Head lice grow up very fast indeed. When I was eight or nine days old, I was already a grown-up louse. I had even met my mate and, in a very short time, she began to lay tiny silvery-white eggs in special casings that are called nits. She used to lay her eggs at night. Every night she would lay eight or sometimes ten new nits. But she did not just leave them in the one place. Nits need a mother's special care if they are going to survive.

头虱的生长速度特别快，这话一点儿不假。我长到八九天大时就已经是成年虱子了。甚至我已经找完了配偶，很快她就开始产下一粒粒银白色的卵了，这些非常微小的虱卵被包在一种特别的外壳里叫作虬子。她通常都在晚上产卵。每天晚上她可以生下八个虬子，有时候还可以生十个。但是她并没有把这些虬子在某一个地方随便一放了事。虬子要成活还需要妈妈的特别照料。



She very carefully picked up each nit and placed it on its own shaft of hair. She had to place it near the bottom of the shaft, close to the warm scalp. Then she would stick the nit in place with special waterproof glue. Because of that, when our human host scratched his head or washed his hair, the nits would still be safe on their shaft and not fall off.

My mate kept herself very busy for more than two weeks. Each night she would lay lots of eggs. When she finished all her hard work, she had laid nearly 100 eggs.

So, imagine these eggs firmly stuck on a hair on somebody's head. Ah, there's a problem, isn't there? Hair grows, doesn't it? So, slowly the nits are moving further away from the scalp that is keeping them warm. The baby lice will have to hatch from their eggs before they move too far away from the scalp, where they would die from the cold. And that is exactly what happened. After eight or nine days, out they came. They all looked exactly like their parents, and were able to feed and look after themselves from the moment they were born.

她把虬子一个个小心地抱起来放到头发丝上，一根头发上放一个。她必须把虬子放在离头发根不远的地方，这样可以让它靠近温暖的头皮。然后她用一种特别的防水胶把虬子粘在头发上。这样当我们人类宿主挠头或洗头时，虬子仍然可以安然无恙，不会有从头发上掉下来的危险。

我的配偶要忙碌两个多星期。每天晚上她都要产很多卵。等她忙完了这项工作以后，产下的卵已经达到将近100个。

你想想看，这些卵都牢牢地粘在一个人的一根头发上会是什么样子。啊，对了，还有一个问题，对不对？头发是要长长的，对吧？这样一来，虬子慢慢地就会离温暖的头皮越来越远了。幼虱必须赶在远离头皮之前从卵里孵化出来，不然就会被冻死。实际上它们也正是这样做的。八九天之后它们就出世了。它们的长相和父母一模一样，而且一出生就会自己觅食，自己照料自己的一切。

*An unusual case - hair with hundreds of nits.*

一种非常罕见的情景——头发上聚集着数百只虬子。

## Lice mystery

On human girls, most nits are found over and behind the ears. On boys, most nits are found on top of the head.

## 虱子之谜

虬子大多出现在女孩子耳朵的上方和后侧，而在男孩子身上虬子通常集中在头顶。

## Egg head

If you find a nit more than a centimetre from your scalp, it will be empty. The louse that was inside it has already left it and found a new home.

## 头上的虱卵

如果你在距离头皮一厘米以上的地方发现了虬子，那么这个虬子肯定只是一个空壳。里面的虱子早已跑出去到别的地方安家了。



## Lice record

1,434 lice were found on the head of a woman in Burma. That is a world record!

### 一项关于虱子的纪录

有人曾经在一个缅甸女人的头上找到过1434只虱子。这创下了一项世界纪录!



If you look carefully, you will probably only find about ten lice on one human head. If the head where I am living becomes too crowded, I will have to move on to another one. Now, that is not a very easy thing to do, because I don't have wings like a mosquito and I can't jump like a flea. So, I will have to be very patient and wait until another human head touches the one that I'm living on. I told you that I could move very quickly when I need to. Well, this is one of those occasions when I will need to move very fast indeed.

如果你仔细观察，在一个人的头上只会找到十只左右的虱子。我居住的人头上如果变得越来越拥挤，我就得搬到另一个人的头上去住。这不是一件轻而易举的事，因为我既没有蚊子那样的翅膀，又不像跳蚤那样会跳。因此，我只好耐心地等着另一个人的头和我居住的人的头碰在一起。我告诉你必要时我可以跑得飞快。好，现在就正是需要一个我使劲儿飞跑的时候。



*A louse runs along a hair shaft at top speed.*

一只虱子正沿着一根头发全速奔跑。

I will have to find a hair shaft from the new head and race along it before it moves away.

If too many of us stay on this head, our human host will want to scratch the whole time. He'll feel very uncomfortable and, worst of all, he'll know that we are there. Then, he might try to get rid of us. But he won't find this easy to do. He can try to drown us if he likes, but it will make no difference at all. He won't have much luck with shampoo or conditioner either. We just hang on tightly to our hair shafts and hold our breath.

我必须找到一根从新来的这个人头上伸过来的头发，并且要赶在这根头发移开之前赶快顺着它跑过去。

如果我们很多同伴都住在这个人头上，我们的人类宿主就会不断的挠头。他会觉得很舒服，最糟糕的是他会知道我们来到了他的头上。这样一来，他就会想把我们除掉。不过他很快就会发现这不是一件容易的事。他可能试图淹死我们，但是这个办法根本没用。用香波或者护发剂也好不了多少。我们会屏住呼吸，紧紧抱住头发丝。

## Ancient cures

Body lice, a relative of head lice, often live in the seams of clothing. In World War I, Russian soldiers solved this problem. They used to put their clothes on ants' nests, and the ants ate the lice.

### 古老的验方

体虱是头虱的亲戚，通常住在衣服缝里。第一次世界大战的时候，俄国士兵想办法解决了这个难题。他们把衣服放到蚂蚁的巢穴上，这样蚂蚁便把虱子吃掉了。



You can even find special anti-lice shampoo that is supposed to kill us all. But, luckily, it doesn't always work. I will tell you a little secret, but please don't tell anyone. There is only one way to really get rid of us. What you need is one of those combs with very fine teeth. Then you will have to spend a lot of time combing every part of your hair until we have all disappeared. We can't defend ourselves from careful combing. It breaks our legs and it becomes difficult to keep our tight grip on the hair. When we aren't able to grip any longer we fall off and that's the end of us!

你甚至可以找到专门抗虱的香波,据说这种香波能把我们全杀光。不过值得庆幸的是这种香波并不都有效。我告诉你一个小秘密,你可别告诉别人啊。要想把我们彻底赶跑只有一个办法:你需要找一把那种齿子很密的梳子。然后就要花很多时间用这把梳子把自己的头发一块一块地都梳个遍,直到我们全部消失为止。对付仔细的梳理我们可是一点办法都没有,我们的腿会被折断,这样要紧紧抱住头发丝可就不那么容易了。我们要是抓不住头发丝从上面掉下来,我们可就没命了!

*The louse's mouthparts are tucked away when the louse is moving.*  
虱子移动的时候要把口器收起来。

*It is very difficult to crush the louse's strong, leathery outer covering.*  
碾碎虱子强壮而坚韧的外壳非常困难。

### Favourite brand

If one anti-lice shampoo is used too often, lice can become immune to it – you will need to try a different brand.

### 喜爱的品牌

如果经常使用某种抗虱香波,虱子会对这种香波产生免疫力——你需要更换使用另一个品牌的香波。

*A nit glued onto the base of a hair shaft.*

一只粘在头发根部的虱卵。

