“ Hidden ” Species May Be Surprisingly Common Cryptic species animals that appear identical but are genetically quite distantmay be much more widespread than previously thought.The findings could have major implications in areas ranging from biodiversity estimates and wildlife management ， to our understanding of infectious diseases and evolution. Reports of cryptic species have increased dramatically over the past two decades with the advent of relatively inexpensive DNA sequencing technology.Markus Pfenninger and Klaus Schwenk， of the Goethe-Universitat， in Frankfurt1， Germany， analyzed all known data on cryptic animal species and discovered that they are found in equal proportions throughout all major branches of the animal kingdom and occur in equal numbers in all biogeographieal regions. Scientists had previously speculated that cryptic species were predominantly found in insects and reptiles， and were more likely to occur in tropical rather than temperate regions. “ Species that are seemingly widespread and abundant could in reality be many different cryptic species that have low populations and are highly endangered, ” says Pfenninger. Until the genetic information of all species in at least one taxon is thoroughly studied， no one will know just how many cryptic species exist. “ It could be as high as 30%, ” Pfenninger says. “ I ’ m extremely surprised by their results," says Alex Smith of the University of Guelph2 in Ontario3， Canada. “ It

’s a call to arms to keep doing the broad kind of genetic studies that we are doing.” Sampling as many individuals as possible，scientists hope to complete work on all fish and birds in another 5 to 10 years.Onee either of these taxonomic groups is completed，Pfenninger says researchers will be able to decide how many cryptic species exist throughout the animal kingdom. Examples of cryptic species include the African elephant. A 2001 study found the elephants were actually two genetically distinct，non-interbreeding species，the African bush elephant and the African elephant. The species are currently listed as vulnerable and threatened，respectively，by the World Conservation Union (WCU) 4. The reclassifications are more than an academic exercise.They define populations that have evolved independently of each other and whose genetic differences can have significant consequences. In the early 1900s misidentification of mosquito species based on morphology confused attempts to control malaria in Europe.Ultimately，what was thought to be a single species was actually made up of six sibling species，only three of which transmitted the disease.“ The basic unit in biology is always the species，and you have to know what you are dealing with,” Pfenninger says.Much previous research is now no longer used，he says，because it is not clear what species was being studied. 词汇: cryptic/5kriptik/adj.隐蔽的.隐藏的 taxon/5tAksCn/ n.(生物的) 分类单元 biodiversity n.生物多样性 taxonomic adj.分类 (学) DNA n.脱氧核糖核酸 non-interbreeding adj.非杂交繁殖的 (deoxyribonucleic acid 的缩写)morphology/mC:5fClEdVi/n.形态

学 malaria/mE5lZEriE/ n.疟疾 reptile/5reptail/n.爬行动物 sibling/5sibliN/n.同胞，同属 temperate/5tempErit/adj.(气候) 温带的 注释： 1. the Goethe-Universitat in Frankfurt：德国法兰克福大学，即Johann Wolfgang Goethe- Universitat Frankfurt am Main，位于美因和莱茵两河汇流处的法兰克福。 2. the University of Guelph：圭尔夫大学。该校成立于1964年，是一所公立的综合性大学。在2005年加拿大综合类大学评比中，圭尔夫大学名列第3名，是全加拿大最著名的高等学府之一。 3. Ontario：安大略。加拿大中东部的一个省。 4. the World Conservation Union：世界自然保护联盟。全球最大、最重要的自然保护网络机构，它集合了82个国家、111个政府机构、800多个非政府组织以及来自181个国家的约1万多名科学家和专家，形成了世界环保领域里独一无二的全球性合作关系。 练习： 1. Which of the following about the significance of the research on cryptic species is NOT true? A The results of the research can help the development of many other researchareas. B The restllts of the research can help the development of biodiversityestimates. C The results of the research can help our understanding of infectious diseaseevolution. D The results of the research can help our understanding of “ survival of thefittest. ” 2. What was scientists ’ understanding of cryptic species? A They occurred in equal numbers in all biogeographical regions. B They were mostly found in insects find reptiles. C They were likely to be in tropical rather than temperate regions. D Both B and C. 3. Do scientists know how many cryptic species exist? A Not yet. B Yes， they do. C They will know the answer in another one or two years. D They will never know the

answer. 4. Which of the following about the African bush elephant and the African elephant is true? A The WCU are interbreeding those elephants. B They are interbreeding species. C They are two genetically distant species. D They depend on each other for survival. 5. People were confused in their attempts to control malaria in Europe in the early1900s，because scientists A identified only one mosquito species instead of six species. B thought only three mosquito species transmitted disease. C thought there was only one mosquito species. D did not know what species was being studied.

答案与题解： 1. D 短文的第一段第二句的大意是，研究结果为广泛的研究领域提供启示，包括生物多样性研究，还能帮助我们理解传染疾病及其演变。所以，选项A、B、C都是正确的，它们不是答案。选项D的“ 适者生存 ”的内容文章中没有提及，因此是本题的答案。 2. D 短文的第二段第二句描述的是科学家目前的研究结果，第三段描述的是科学家在这之前对于cryptic species的理解。本题用的是过去式，问的是过去的状况，因此，答案在第三段中，B和C是答案，所以D是正确选择。 3. A 第三段和第五段提供了答案。第三段的倒数第二句中的Until...no one will know just how many cryptic species exist.其意思就是人们目前还不了解。第五段的最后一句也说明了研究者目前对此尚未了解。 4. C 答案在第六段中。该段举了非洲大象为例，说明什么是cryptic species。第六段的句子“ A 2001 study found the elephants were actually two genetically distinct，non- interbreeding spemes ”是选择C的依据。选项A不对，the WCU并没有杂交繁殖这两种象。选项B不对，短文说这两种象是非杂交物种。选项D的内容短文中找不到。 5. A

短文最后一段告诉我们，由于对蚊子种类不了解，20世纪初期疟疾曾肆虐欧洲，最终，科学家才了解到蚊子这一物种不是由一个种类而是由六个种类组成。所以，应该选择A。 相关推荐：把职称英语页面加入收藏 2009年职称英语考试成绩查询汇总 2009年职称英语考试试题及答案点评专题 编辑推荐：为帮助广大学员有效备考，我们特推出了职称英语2010年网络辅导课程,相信会让大家有耳目一新的视听感受。现在报名职称英语辅导，赠送2009年精品课程及考试E币。点击查看详情》 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com