



中国鸟类研究简讯

Newsletter of China Ornithological Society



中国动物学会鸟类学分会
China Ornithological Society



全国鸟类环志中心
National Bird Banding Center

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红颈瓣蹼鹬 (*Phalaropus lobatus*)
摄影 薄顺奇



黄腹花蜜鸟 (*Cinnyris jugularis*)
摄影 杨卫光



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会议纪要



中国动物学会第十七届全国会员代表大会暨学术讨论会、中国动物学会成立八十周年纪念会在中山大学举行

中国动物学会第十七届全国会员代表大会暨学术讨论会、中国动物学会成立八十周年纪念会，于 2014 年 11 月 17—20 日在广州市中山大学隆重举行。会议由中国动物学会主办，广东省动物学会、中山大学、华南濒危动物研究所（广东省昆虫研究所）、有害生物控制与资源利用国家重点实验室（中山大学）和广州动物园共同承办。来自全国 29 个省、市、自治区及香港地区的中国动物学会会员、动物学界的专家、学者及相关领域的科技工作者、学生代表、工作人员等近 700 人欢聚一堂，共同庆祝中国动物学会成立八十周年并进行学术交流。

中国科学院动物研究所王祖望研究员作了“中国动物学会成立 80 周年回顾”的大会报告，回顾了学会八十年走过的历程，取得的成就，重温了老一代动物学家的家国情怀。复旦大学金力院士作了“流动的基因”，中国科学院水生生物研究所桂建芳院士作了“多倍体银鲫的故事——从进化起源、分布格局、生殖方式、发育遗传和育种实践谈起”，清华大学李蓬教授作了“脂肪代谢调控与肥胖发生”，中国科学院动物研究所魏辅文研究员作了“大熊猫保护生物学研究：生态、行为、遗传与基因组”，中国科学院海洋研究所张国范研究员作了“中国的牡蛎研究”，中山大学何建国教授作了“对虾白斑综合症生态

防控理论与技术”，湖北大学李代芹教授作了“UV coloration in jumping spiders: Mechanisms, function and evolution”等大会报告。在 11 个专题讨论会上，共有 204 位学者和研究生作学术报告。

鸟类学分会、兽类分会和两栖爬行动物分会联合承办了“脊椎动物生态、适应与进化”专题讨论会。本专题共安排了 31 个报告，内容涉及到脊椎动物的表型和遗传分化、协同演化、行为进化、生态适应、保护与生活史策略等方面，反映了当今脊椎动物生态、适应与进化的主要研究方向及研究热点问题。本专题是本次大会中最受欢迎的专题讨论会之一，约 250 人次参加了本专题的交流。

在会员代表大会上，通过无记名投票方式选举产生了中国动物学会第十七届理事会的 123 名理事。当选理事通过无记名投票选举产生了第十七届理事会的 41 名常务理事和学会负责人。孟安明院士当任新一届理事长负责人。陈宜瑜院士为名誉理事长。副理事长为张知彬（常务）、孙青原、宋微波、魏辅文、张正旺、李保国。理事会信息见 http://czs.ioz.cas.cn/xwdt/gzdt/201412/t20141203_270962.html。

中国动物学会鸟类学分会 2014 年常务理事扩大会议会议纪要

2014 年 8 月 3 日，中国动物学会鸟类学分会常务理事扩大会在山东曲阜师范大学召

开。鸟类学分会常务理事以及郑光美、王凤琴、钱法文、常青、张子慧、杨月伟等参加了本次会议，山东师范大学赛道建、《Avian Research》编辑部程朋军、安徽师范大学李春林等列席了会议。

常务理事扩大会议由丁平理事长主持，张雁云秘书长汇报了学会秘书处换届以来的工作情况、杭州鸟类学大会财务决算以及和下一年工作计划；安徽大学周立志教授和李春林博士汇报了第十三届全国鸟类学术研讨会筹备情况；邹红菲教授汇报了中国鸟类学工作者文献数据库的建设设想和构架；张雁云秘书长代雷富民副理事长宣读了“关于筹办亚洲鸟类学大会、推动亚洲鸟类学家联盟的想法”；张正旺教授介绍关于举办国际雉类学术研讨会的设想；《Avian Research》编辑部程朋军先生汇报了有关刊物更名、新一届编委会的组建以及组稿情况。随后，与会代表对第十三届全国鸟类学术研讨会筹备和各委员会主任委员人选、学会秘书处工作、《Avian Research》的发展、举办国际会议等问题进行了讨论，并提出了很多很好的建议。

会议就如下问题做出决议：

(1) 定于 2015 年 11 月 12—15 日在安徽大学校本部召开第十三届全国鸟类学术研讨会。

(2) 确定孙悦华、张雁云分别担任第十三届全国鸟类学术研讨会学术委员会主任委员和组织工作委员会主任委员。学术委员会主要负责本次大会的日程安排、确定了论文征集编辑、大会报告和专题报告的确定等。组织委员会主要负责本次会议的组织协调。

(3) 同意邹红菲教授关于中国鸟类学文献数据库建设的设想，建议由东北林业大学图书馆主导完成数据库的设计和文献收录工作，并由学会秘书处协调数据库与中国鸟类史料馆的后续对接工作。

(4) 选定由安徽大学、北京林业大学、

北京师范大学、复旦大学、海南师范大学、华南濒危动物研究所、兰州大学、浙江大学、中科院昆明动物所、中科院动物所等单位各推荐一名报告人，代表鸟类学会在广州的中国动物学会第十七届全国会员代表大会暨学术讨论会“脊椎动物生态、适应与进化”（鸟类分会、兽类分会、两爬分会联合主办的专题）专题报告会上作报告。

(5) 与会人员认为鸟类学会各位理事和编委应加强对《Avian Research》的关注一致同意郑光美主编建议雷富民研究员为执行副主编的提议。

本次常务理事扩大会的召开，得到了曲阜师范大学的大力支持。曲阜师范大学傅永聚校长、生命科学学院徐来祥院长、生命科学学院杨月伟院副院长为本次会议的顺利、圆满召开提供了重要保障。

(鸟类学分会秘书处)

第 26 届国际鸟类学大会在日本召开

2014 年 8 月 18—24 日在日本召开了第 26 届国际鸟类学大会 (International Ornithological Congress) 本次大会是由国际鸟类学家联盟 (IOU) 主办，日本鸟类协会 (OSJ) 和日本立教大学 (Rikkyo University) 承办的。来自世界 63 个国家的 1,134 位代表参加了会议。参加本次会议的中国大陆代表有 30 余人，港台代表近 30 人。在本次国际鸟类大会上，我国学者的研究成果得到了充分展示。中国科学院生态环境研究中心的曹垒研究员做了大会报告，李寿先（台湾）、孙悦华、马志军、刘阳等分别主持了分组报告会，陈水华、马志军、余日东（香港）、曹垒等主持了圆桌讨论会，其他大陆代表分别通过分组报告会、口头报告会或墙报展示了自己的研究成果。屈延华、曹垒被增补为 IOC

委员, 刘小如(台湾)和雷富民分别当选为主席、副主席。至此, 国际鸟类学委员会主席、副主席、执委和委员中均有中国学者, 显示了我国鸟类学研究在国际上的影响力。

(分会秘书处)

第十届“翠鸟论坛”在北京师范大学举行

2014 年 8 月 14—16 日, 中国青年鸟类学家研讨会暨第十届“翠鸟论坛”在北京师范大学成功召开。本次论坛由中国动物学会鸟类学分会主办, 北京师范大学生命科学学院承办, 北京动物学会、北京动物园和生物多样性与生态工程教育部重点实验室协办。来自北京师范大学、复旦大学、中国科学院动物研究所、中山大学、中国科学院昆明动物研究所等 21 个单位的近百名同学参加。本次论坛分为专家讲座、学生报告、墙报交流和师生研讨等 4 个单元。瑞典自然历史博物馆研究员 Per Ericson、中科院动物研究所的李欣海副研究员、河北师范大学的青年鸟类学者李东明副教授分别举办了讲座, 28 名同学作了分组报告, 14 名同学做了墙报展示。并邀请卢欣、张正旺、张雁云、马志军、屈延华和詹祥江等与同学们进行了圆桌讨论交流。学术活动之后, 还开展了羽毛球比赛和野鸭湖观鸟等活动。

白腹鹭保护策略专题研讨会在印度召开

2014 年 12 月 2—4 日, 由 ATress, Bird-life International, Synchronicity Earth, Partnership for and People, BNHS of India 等 10 家保护机构支持, 在印度阿萨姆邦首府高哈地市召开了白腹鹭(*Ardea insignis*)保护策

略专题研讨会。来自中国、缅甸、不丹、印度、英国、德国的代表共 30 多人参加会议。中国参会代表有西南林业大学韩联宪教授和香港嘉道理农场的陈辈乐博士。

白腹鹭主要栖息于东喜马拉雅山地区, 分布于不丹、印度北部和缅甸北部, 分布区域狭窄, 数量极其稀少, 专家估计种群数量为 300~500 只, 被 IUCN 红色名录列为极危级别。

会议期间不丹、印度、缅甸代表分别介绍了各自国家对白腹鹭的调查、研究所获信息资料及其现状。中国代表也介绍了 2014 年 8 月在云南省怒江州泸水县发现 1 只白腹鹭亚成鸟的有关情况。

经过充分交流讨论, 会议决定在今后 5 年内, 加强筹集保护资金, 在白腹鹭的生态行为研究, 公众意识保护教育, 社区生机的可持续发展等方面组织更多的研究和项目, 强化分布区域河流的生态保护, 并在其潜在分布区的边境地带加强调查。

依据相关生态资料以及参考缅甸白腹鹭的分布情况, 我们认为该鸟在中国的潜在分布区为云南瑞丽西南部、腾冲西北部、贡山独龙江中上游和西藏察隅南部等地。2015 年西南林业大学鸟类研究组和嘉道理农场, 将结合各自在中国潜在分布区的保护项目启动白腹鹭的调查工作。

(西南林业大学 韩联宪; 香港嘉道理农场 陈辈乐)

第 16 届国际雁类学术研讨会暨 IUCN/WI 雁类专家组会议在北京成功召开

第 16 届雁类专家组会议暨国际雁类学术研讨会于 2014 年 11 月 22—25 日在北京召开会议由世界自然保护联盟物种生存委员会(IUCN-SSC)/湿地国际(Wetlands

International, WI) 雁类专家组主办, 中国科学院生态环境研究中心城市与区域生态国家重点实验室承办, 中国动物学会鸟类学分会协办。会议得到了国家自然科学基金委、国际鸟盟和中国科学院生态环境研究中心的资助。

雁类专家组是世界自然保护联盟物种生存委员会和湿地国际这两个国际自然保护组织共同的下属机构, 主要职责是汇编现有的雁类研究成果以及西古北区雁类种群的分布, 为雁类的科学管理和相关国家与地区的决策提供指导, 加强雁类迁徙研究者之间的国际交流。

全球有9条水鸟迁徙路线, 由于人口和经济的快速增长, 东亚-澳大利亚迁徙路线成为受威胁最为严重的迁徙路线, 50%的已知水鸟种群数量出现下降。中国处于这条迁徙路线的中心位置, 南来北往的迁徙鸟类都要经过, 地理位置十分重要。为了推动该迁徙路线上雁类的研究和保护工作, 雁类专家组在北京召开了本次会议。

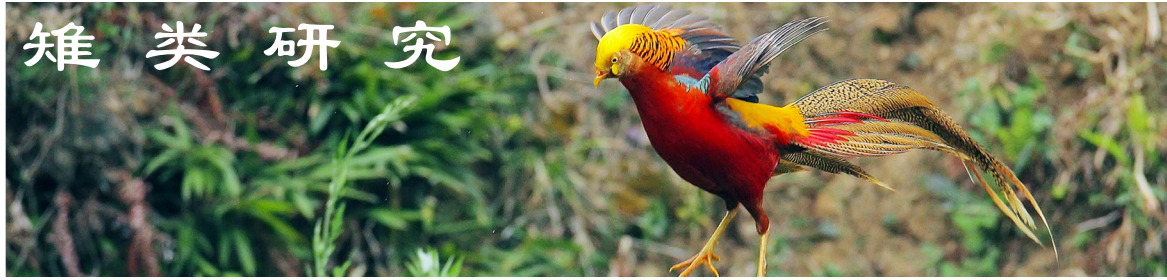
参会的雁类专家和生态环境专家共100余人, 其中外籍专家40余位, 来自英国、荷兰、丹麦、俄罗斯、澳大利亚、日本、韩国、蒙古等及相关地区。会议议程涵盖11个专题,

有8个大会邀请报告和45个报告。本次学术会议委员会成员由主席 Bart Ebbinge (荷兰) 以及5名成员 Anthony Fox (丹麦)、曹垒 (中国)、John Takekawa (美国)、Matsayuki Kurechi (日本)、Ray Alisauskas (加拿大) 组成。主要针对如下三个领域进行了深入的研讨: (1) 全球以及东亚雁类种群现状、受胁因素以及相应的监测和保护工作; (2) 物种研究的最新进展, 包括鸿雁、小白额雁、白额雁和斑头雁等6个物种; (3) 长江流域雁类研究进展。

会议集中探讨了东亚迁徙路线雁类研究和保护的现状及对策, 对比了欧洲和美国正在从事的监测和保护工作, 分析了欧美的成功经验。与会专家一致通过, 筹建东亚雁类合作研究和监测网络, 并确定鸿雁、小白额雁等为优先研究的物种和监测对象。同时, 根据东亚雁类研究的结果, 按照迁徙路线的概念进行汇总和研讨, 为实施大尺度研究和保护工作奠定了基础, 这些对于东亚以及世界雁类研究和保护具有十分重要的意义。

第17届国际雁类学术研讨会将于2015年11月在俄罗斯召开。

(中国科学院生态环境研究中心 曹垒)



冰期大陆架提供长距离扩散路线——以东南亚起源的海南山鹧鸪和台湾山鹧鸪为例

研究岛屿生物的起源对现代进化生物学和生物地理学的发展起着重要作用。已有大量研究表明大陆性岛屿的生物直接来源于其相邻的大陆，仅有个别研究提出大陆性岛屿的生物也可能来源于其它更远的地区。本研究以中国西南山地和东南沿海地区、中南半岛、海南岛和台湾岛分布的山鹧鸪（*Arborophila* spp.）为例，以检测大陆性岛屿的生物是否可能直接来源于不相邻的大陆。

基于三个线粒体片段和三个核基因内含子的分子系统发育和祖先分布区预测结果表明海南山鹧鸪和台湾山鹧鸪很可能从中南半岛扩散而来，并不是起源于相邻的中国东南沿海地区。分化时间结果进一步表明海南山鹧鸪和台湾山鹧鸪的祖先很可能沿着更新世冰期所露出的浅海大陆架从中南半岛扩散至海南岛和台湾岛，后由于海平面的上升导致两个种的分化。因此，整合物种分布数据和系统发育信息能够为大陆性岛屿及其周边地区的历史生物地理学提供新线索。

（陈德 常江 姚正得 张正旺 李寿先（台湾）

刘阳 梁伟 周放）



2014 年秋季迁徙鹤类和水鸟同步调查

2014 年秋季迁徙水鸟同步调查共开展了 3 次, 分别是 9 月 24 日、10 月 17 日、和 10 月 31 日。调查地点包含了从呼伦贝尔和三江平原到黄河三角洲共 36 个湿地 124 个调查点, 共记录到鸟类 17 目 50 科 218 种。除此之外, 11 月 9 日, 各地观鸟志愿者、相关保护区、科研院校科研人员等 30 多人在渤海湾的 19 个河口、滨海滩涂和水库湿地对迁徙的东方白鹳(包括其他水鸟)进行同步调查, 共计观察到 1,465 只东方白鹳。

9 月 24 日共调查到丹顶鹤 102 只(6 幼)、白头鹤 7 只、白枕鹤 48 只(1 幼)、蓑羽鹤 1 只、灰鹤 287 只、东方白鹳 176 只、黑鹳 1 只、大鸨 14 只、大天鹅 15 只、小天鹅 306 只、疣鼻天鹅 3 只、鸿雁 123 只、豆雁 6,366 只、白额雁 16 只、灰雁 120、赤麻鸭 518 只、翘鼻麻鸭 921 只、赤颈鸭 479 只、罗纹鸭 713 只、赤膀鸭 6,438 只、绿翅鸭 3,533 只、绿头鸭 6,139 只、斑嘴鸭 4,015 只、针尾鸭 32 只、白眉鸭 30 只、琵嘴鸭 2,055 只、红头潜鸭 396 只、凤头潜鸭 3,026 只、斑背潜鸭 144 只、鹊鸭 3,211 只、斑头秋沙鸭(白秋沙鸭) 14 只、红胸秋沙鸭 11 只、普通秋沙鸭 46、小 412 只、凤头 533 只、黑颈 37 只、普通鸬鹚 387、苍鹭 503 只、草鹭 43 只、大白鹭 431 只、中白鹭 15 只、白鹭 338 只、牛背鹭 12 只、池鹭 15 只、夜鹭 1,128 只、大麻鸭 13 只、白琵鹭 272 只、小田鸡 3 只、黑水鸡 119 只、白骨顶(骨顶鸡) 4836 只、砺鹬 1,900 只、黑翅长脚鹬 317 只、

反嘴鹬 1,382 只、普通燕鹬 21 只、凤头麦鸡 1,494 只、灰头麦鸡 47 只、灰鹧(灰斑鹧) 3,706 只、金眶鹧 6 只、环颈鹧 2,5821 只、针尾沙锥 3 只、黑尾塍鹬 240 只、斑尾塍鹬 8,240 只、小杓鹬 69 只、中杓鹬 24 只、白腰杓鹬 384 只、大杓鹬 3,275 只、鹤鹬 57 只、红脚鹬 4,699 只、泽鹬 7 只、青脚鹬 3,552 只、白腰草鹬 2 只、翘嘴鹬 28 只、尖尾滨鹬 162 只、黑腹滨鹬 12,836 只、黑尾鸥 2,662 只、普通海鸥(海鸥) 129 只、银鸥 1,084 只、黄脚银鸥 32 只、灰背鸥 15 只、红嘴鸥 5,099 只、黑嘴鸥 11,243 只、鸥嘴噪鸥 8 只、红嘴巨燕鸥(红嘴巨鸥) 128 只、普通燕鸥 406 只、白额燕鸥 348 只、灰翅浮鸥(须浮鸥) 70 只、白翅浮鸥 214 只、普通翠鸟 5 只、未知鸭类 1,180 只等。

10 月 17 日共调查到白鹳 136 只(22 幼)、丹顶鹤 49 只(2 幼)、白枕鹤 25 只、东方白鹳 15 只、大天鹅 16 只、豆雁 5150 只、灰雁 1057 只、赤麻鸭 779 只、翘鼻麻鸭 40 只、鸳鸯 4 只、赤颈鸭 7 只、罗纹鸭 76 只、赤膀鸭 325 只、绿翅鸭 708 只、绿头鸭 1786 只、斑嘴鸭 345 只、针尾鸭 8 只、白眉鸭 45 只、琵嘴鸭 160 只、红头潜鸭 36 只、凤头潜鸭 1,676 只、斑背潜鸭 27 只、鹊鸭 554 只、普通秋沙鸭 4 只、小鸬鹚 7 只、赤颈鸬鹚 4 只、凤头鸬鹚 149 只、普通鸬鹚 31 只、苍鹭 68 只、草鹭 5 只、大白鹭 102 只、牛背鹭 2 只、大麻鸭 2 只、白琵鹭 128 只、黑水鸡 29 只、白骨顶(骨顶鸡) 4,288 只、鹤鹬 18 只、普通海鸥(海鸥) 8 只、银鸥 80 只、渔鸥 2 只、红嘴鸥 298 只、普通燕鸥 78 只、白额燕鸥 45

只、白翅浮鸥 97 只、未知鸭类 7,910 只、未知鹈类 10 只、未知鸥类 357 只等。

10 月 31 日共调查到白鹤 15 只(2 幼)、丹顶鹤 48 只、白头鹤 6 只、白枕鹤 38 只、灰鹤 18 只、东方白鹳 242 只、大天鹅 21 只(1 幼)、鸿雁 6 只、豆雁 998 只、白额雁 147 只、赤麻鸭 49 只、翘鼻麻鸭 2 只、赤颈鸭 6 只、罗纹鸭 29 只、赤膀鸭 548 只、花脸鸭 520 只、绿翅鸭 822 只、绿头鸭 3,197 只、斑嘴鸭 243、针尾鸭 167 只、白眉鸭 7 只、琵嘴鸭 167 只、红头潜鸭 68 只、凤头潜鸭 2,225 只、斑背潜鸭 84 只、斑脸海翻鸭 2 只、鹊鸭 742 只、红胸秋沙鸭 4 只、普通秋沙鸭 142 只、中华秋沙鸭 9 只、小 32 只、凤头 396 只、普通鸬鹚 6 只、苍鹭 109、草鹭 12 只、大白鹭 130 只、白鹭 4 只、大麻鸭 1 只、白骨顶(骨顶鸡) 1,790 只、凤头麦鸡 67 只、普通海鸥(海鸥) 9 只、银鸥 196 只、红嘴鸥 393 只、未知雁鸭类 6,081 只、未知鸥类 368 只等。

上述数量,只统计了已返回数据的湿地,因此这里报告的水鸟数量应小于实际水鸟数量。2014 年秋季同步调查与春季调查相比,参与调查的地区和人员均有提高,返回的数据也比以往规范,望大家继续努力!向每一位在水鸟同步调查中付出辛劳的朋友致以衷心的感谢!

(苏立英 唐林芳)

鸬鹚类国际重要湿地之一——陕西渭南卤阳湖湿地

卤阳湖湿地位于陕西省渭南市蒲城县西南(34°47'49"N, 109°26'37"E~34°49'14"N, 109°34'29"E)。海拔 369~440 m, 生境类型包括人工盐池、水塘和芦苇沼泽地,形成于距今 300 多年前,面积约 660 hm²,其中 80% 为湿地。由于盐农精细的管理,盐池的水位

和盐度水平不断变化,为在此迁徙和停歇的鸬鹚类提供了包括盐水虾和卤蝇为主的季节性食物资源。2012—2014 年的初步监测结果发现:1)自 2012 年以来,共有 36 种鸬鹚类在此分布;2)卤阳湖湿地对至少 3 种涉禽(鸬鹚、长嘴剑鸬和黑翅长脚鸬)至关重要,种群数量超过东亚—澳大利亚迁徙路线总数量的 1%;3)发现环颈鸬、金眶鸬、普通燕鸬、灰头麦鸡和黑翅长脚鸬等至少 5 种水鸟在此繁殖;4)随着其他非繁殖水鸟新纪录不断出现,发现卤阳湖湿地对迁徙鸟类换羽也具有重要作用,是一个新的对迁徙水鸟的觅食和停歇具有全球重要性的地点。

(陕西 罗磊 高学斌)

我国人工引导鸟类选择繁殖地试验再获成功——中华凤头燕鸥育雏数量创新纪录

宁波象山县韭山列岛的一个无人荒岛上,经过 3 个多月的精心守候和监护,13 只中华凤头燕鸥幼鸟和 1,000 多只大凤头燕鸥雏鸟一起终于学飞成功,这标志着中华凤头燕鸥种群人工招引与种群恢复项目在 2014 年再次获得成功,中华凤头燕鸥的繁殖个体数量高达 43 只,达到了历史新高,引起了国内外鸟类学家的高度关注。

中华凤头燕鸥又名黑嘴端凤头燕鸥,1861 年在印尼东部被首次记录,1937 年在我国山东青岛采集到标本后,直到 2000 年,才在台湾马祖列岛被重新发现。据估计全球数量不足 50 只,一直被世界自然保护联盟(IUCN)列入极度濒危(CR)物种。

韭山列岛属于海洋类型的国家级自然保护区,也是中华凤头燕鸥的历史繁殖地。2004 年和 2007 年两次被发现中华凤头燕鸥和大凤头燕鸥繁殖群繁殖,但由于遭受人

为捡蛋和台风,繁殖均告失败,导致燕鸥繁殖种群消失。鉴于近年来保护区加强了宣传和保护工作,以及广大沿海区域未受严格监管的现状,为了切实保护并挽救中华凤头燕鸥这一极度濒危的鸟类,2013 年开始,保护区联合浙江自然博物馆、美国俄勒冈州立大学、浙江野鸟会等多家单位,引进了美国的先进经验,首次在我国开展人工引导鸟类选择繁殖栖息地的试验,并获得了成功。当年吸引了 3,000 多只大凤头燕鸥和 19 只中华凤头燕鸥前来栖息,且有 1 只中华凤头燕鸥和 600 只大凤头燕鸥幼鸟成功繁殖飞离。2014 年 5 月初,该项目再次在保护区内启动,项目组在招引现场开展了栖息地修整、鼠害清除、燕鸥假鸟布设、声音回放设备安装,以及观察木屋和监测帐篷的搭建等工作。今年,监测人员首次进驻繁殖岛屿,全天候 24 小时近距离观察监测繁殖种群。在偏远荒岛无人、无水、无电的严苛条件下,工作小组和监测人员通过 4 个多月艰苦的努力,成功吸引并监护 4,000 多只大凤头燕鸥和 43 只中华凤头燕鸥栖息繁殖,至少有 1,000 多只大凤头燕鸥和 13 只中华凤头燕鸥雏鸟成功繁殖离岛。近距离的监护掌握了大量的第一手资料,为挽救和保护该珍稀物种提供了重要的依据。

本项目的实施,得到了国家林业局、国家海洋局、浙江省林业厅、国际鸟类联盟、香港观鸟会、香港海洋公园保育基金等多方面的支持。

(浙江自然博物馆 陈水华 范忠勇 陆玮玮)

渤海湾环颈鸻巢存活率及其影响因素研究

孵化是鸟类生活史非常重要的一个阶段,理解鸟类在不同环境条件下的孵化成功率及其影响因素,对于制定针对性的管理

和保护对策具有重要意义。在过去的 50 年里,由于围垦和土地开发,黄海生态区的潮间带面积已经减少了近 65%,东亚地区环颈鸻(*Charadrius alexandrinus*)的种群数量也快速下降,关于其种群衰落的原因却知之甚少。对渤海湾地区环颈鸻的繁殖研究发现,孵卵阶段的成功率为 0.228 ($n = 417$),通过 Program MARK 计算巢的日存活率(Daily survival rate, DSR) 0.925 ± 0.004 ($\pm 95\%$ CI),平均孵化成功率为 0.131,是对该物种已有研究报道中巢存活率最低的种群。造成其孵化失败的主要原因来自于人类干扰。相比其他生境,在结晶盐池生境中营巢的巢存活率最高;同时巢筑成时间、巢密度、产卵日期和环颈鸻的巢成功率具有密切的联系。环颈鸻繁殖期的巢存活率长期维持在过低的水平,必将导致其种群出生率低于种群死亡率,造成该地区环颈鸻种群的快速下降。因此建议加强对该地区鸻鹬类营巢栖息地的保护,避免人类活动的干扰。

(阙品甲 常雅婧 Luke Eberhart-Phillips

刘阳 Tamás Székely 张正旺)

中毒白枕鹤被成功救助并抵达鄱阳湖越冬

2014 年 10 月 30 日,在山东省阳谷县郭屯镇张寨村的农田中,当地村民发现 6 只中毒的白枕鹤,当时白枕鹤已经不能站立、饮食和饮水。其中 1 只成鹤已经死亡,另外 1 只成鹤伴有脚趾骨折的症状。其余 4 只鹤中,有一只成鹤为国际鹤类基金会、蒙古野生动物科学与保护中心以及北京林业大学合作研究的佩戴手机信号发射器的个体,该个体是 2014 年夏季在蒙古国环志的。中毒的原因是误食散落在田间拌药的冬小麦种子。

阳谷县林业局的工作人员得知消息后,

立刻将中毒的白枕鹤送到聊城市林业局的救助站救治。中毒的白枕鹤经救治和康复后，4 只白枕鹤于 11 月 11 日在救助点附近成功放飞，并于 12 月初先后抵达越冬地鄱阳湖，比正常迁徙的白枕鹤晚 1 个月到达鄱阳湖。

白枕鹤以及很多其它候鸟每年迁徙经过华北地区的时间正好与当地冬小麦种植的时间重叠。为了使冬小麦种子不被昆虫取食，播种时常将药剂（多菌灵等）搅拌到种子里。目前这两种药剂在作物播种时普遍使用，药

效会持续两个月，也会由于雨水冲刷而失效。农田是很多候鸟非常重要的觅食地，农药拌种会给鸟类带来一些风险。因此，如何消除这个对候鸟的严重威胁是一个亟待解决的重要问题。

（北京林业大学 焦盛武 雷光春；
国际鹤类基金会 李凤山；蒙古科学与保护
中心 Nyambayar Batbayar；聊城市林业局
王涛；阳谷县林业局 崔娟）



我国与各国间环志鸟类回收情况初报

初步统计与我国有环志回收记录联系的国家共23个。我国回收过到14个国家的环志鸟类，分别是澳大利亚、新西兰、蒙古国、俄罗斯、韩国、日本、哈萨克斯坦、瑞典、美国、印度、芬兰、马来西亚、挪威和菲律宾。有20个国家回收过我国环志的鸟类，分别是日本、澳大利亚、俄罗斯、韩国、印度、马来西亚、朝鲜、泰国、蒙古、荷兰、老挝、印度尼西亚、美国、孟加拉国、挪威、瑞典、新西兰、越南、缅甸、所罗门群岛。

有记录的跨国回收的鸟类共有111种，主要是鸕鹚类、雁鸭类、鹤鹑类以及雀形目鸟类。其中大滨鹚最多，国外回收到国内环志的90只，国内回收到国外环志382只，主要的国家有澳大利亚、菲律宾、日本、中国以及俄罗斯。大天鹅被回收的数量仅次于大滨鹚，被回收到464只次。今年在三门峡鸟类环志的16只大天鹅，其中有1只在蒙古国被回收到。

(全国鸟类环志中心 陈丽霞 侯韵秋 陆军)

地回收4只：分别是尚志帽儿山环志的朱顶雀(A116-2038、A116-2028)，青峰环志的银喉长尾山雀(A89-2548)，以及辽宁大连老铁山的田鸫(B150-9598)。

今年环志超过1000只的优势鸟种为朱顶雀(*Carduelis flammea*) 12,697只、田鸫(*Emberiza rustica*) 2,951只、燕雀(*Fringilla montifringilla*) 1,267只、北朱雀(*Carpodacus roseus*) 1,103只、锡嘴雀(*Coccothraustes coccothraustes*) 1,086只。以往的优势鸟种灰头鹀(*Emberiza spodocephala*)、黄眉柳莺(*Phylloscopus inornatus*)则比往年少了许多。

自2007年环志以来，新青鸟类环志站在本区共记录18目46科223种，已环志13目41科185种329,632只。

根据七年的环志数据分析，朱顶雀的数量变化最大，从07年至10年每年的朱顶雀环志数量在五千只上万只以上，不过从2011年至2012年每年环志数量只在十几只到一千多只，而2013年、2014年环志的数量又突破了上万只。朱顶在两年后数量又升到上万只，尚需进一步探讨。

(新青鸟类保护环志站 侯林祥 李红伟)

2014年黑龙江新青鸟类环志站简讯

今年，黑龙江新青鸟类环志站于3月20日开始环志，至11月17日结束，历时150天。全年共环志6目23科82种，23,254只。另外：重捕1,023只，归家42只。新增1种：红颈苇鹀(*Emberiza yessoensis*)。异地环志本

老铁山鸟类环志站工作简讯

2014年鸟类环志从9月10日—11月10日，设网环志61天，共环志鸟类58种5,632只。其中小东沟环志5,541只，管理局救助环志91只。环志数量最多一天是10月23日，环

志 12 种 529 只, 占环志总数的 9.4%。; 环志数量超过 100 只的种类有: 大山雀 (1,541 只)、黄雀 (1,211 只)、燕雀 (748 只)、黄喉鹀 (616 只)、黄腹山雀 (506 只)、红胁绣眼鸟 (262 只)、日本松雀鹰 (183 只)、红胁蓝尾鸲 (172 只)。2014 年共环志猛禽 12 种 337 只, 占全年环志数量的 6.0%。本地重捕 274 只, 异地重捕 1 只。

今年环志, 我站还利用 GPS 卫星定位设备开展普通鵟迁徙规律的研究, 于 10 月 14 日和 15 日为两只普通鵟安装卫星定位跟踪器后放飞, 通过 GPS 反馈信息, 研究普通鵟的迁徙规律, 确定其繁殖地、停歇地和越冬地, 揭示普通鵟的迁徙策略、迁徙路线选择机理和定向机制等问题。目前, 两只鸟迁徙活动正常, 一只在江苏镇江, 一只在江西南昌。

(辽宁蛇岛老铁山国家级自然保护区
王小平)

白鹤与白枕鹤的环志与迁徙跟踪

2014 年 10 月 19—21 日间, 全国鸟类环志中心与吉林向海和莫莫格国家级自然保护区合作, 分别给 5 只保护区救护的白鹤进行了环志与放飞活动。除了给白鹤佩戴金属脚环和彩色脚环外, 还都佩戴了基于国内无线通信系统的 GPS 跟踪器。据跟踪器返回的位点显示, 目前 3 只白鹤已顺利迁徙到达江西鄱阳湖, 1 只在迁徙到达江西后死亡, 还有 1 只迁徙到达江苏后一直滞留在滨海县境内。

2014 年 11 月 11 日, 全国鸟类环志中心与山东省林业厅野生动物保护站合作, 成功为 3 只被救护的 3 只白枕鹤开展了环志与放飞。这些白枕鹤是在山东省聊城市阳谷县被发现的, 估计是误食了伴有农药的冬小麦种子导致中毒。经过聊城市林业局的精心救治, 在确认身体完全康复后, 于 11 月 11 日成功

地给 3 只白枕鹤佩戴了金属脚环、彩色数字脚环和 GPS 跟踪器。不幸的是, 其中一只幼鸟被当地人猎杀, 其余两只成鸟目前已成功迁徙至鄱阳湖。

(全国鸟类环志中心 钱法文)

黑龙江高峰鸟类保护环志站环志工作简讯

高峰鸟类保护环志站春季于 3 月 15 日—6 月 3 日, 历时 81 天; 秋季于 8 月 15 日—11 月 20 日, 历时 98 天。共环志鸟类 88 种 6,606 只, 其中春季环志 65 种 1,720 只, 秋季 78 种 4,886 只。自 1998 年开展环志以来, 截止 2014 年 11 月末, 高峰环志站共在本区发现鸟类 17 目 48 科 227 种, 环志 15 目 43 科 181 种 279,035 只。从环志数量看, 鸟类数量继续呈减少趋势。本年度是高峰环志站自 2001 年以来最少的一年。春季超过 100 只的仅有 3 种, 分别是: 红胁蓝尾鸲 (*Tarsiger cyanurus*) 462 只、黄眉柳莺 (*Phylloscopus inornatus*) 324 只, 黄雀 (*Carduelis spinus*) 123 只。

秋季超过 100 只的为 6 种, 即白腰朱顶雀 (*Carduelis flammea*) 2,355 只、小鹀 (*Emberiza pusilla*) 452 只、黄眉柳莺 235 只、灰雀 (*Pyrrhula pyrrhula*) 130 只、红胁蓝尾鸲 (*Tarsiger cyanurus*) 118 只、黄腰柳莺 (*Phylloscopus proregulus*) 103 只。

2014 年 8 月 5 日救助 1 只东方白鹤, 经过 20 多天喂养, 该鸟恢复了健康, 为其进行了环志 (N00-2166, 彩环 A15), 并佩戴了跟踪器。9 月 5 日飞离高峰环志站。目前, 该鸟已经安全抵达天津北大港水库。在 11 月 9 日的同步调查中被清晰地拍摄到。

(李显达 方克艰)

2014年董寨保护区鸟类环志简报

2014年董寨保护区共开展环志10余次,历时3个月累计环志鸟类5,576只,隶属于8目25科87种。其中新捕8目25科87种计4,917只;重捕4目14科37种计659只。

整理本年度的环志数据,累计捕获归家鸟类16只,分别为赤腹鹰1只、发冠卷尾7只、灰头鹀2只、北红尾鹀2只、黄喉鹀3只、红胁蓝尾鹀1只。

(董寨环志站)

2014年北京市鸟类环志站工作简讯

北京市鸟类环志站2014年环志工作主要包括对救护的野生鸟类环志和在环志站点网捕鸟类环志。

2014年共计环志救护的野生鸟类45种247只,其中国家一级保护动物2种5只,国家二级保护动物16种80只。

2014年春季环志工作在西山国家森林公园和翠湖国家城市湿地公园2个环志站点开展,自3月下旬至5月中旬,累计工作16天,环志鸟类25种146只,其中候鸟16种,留鸟8种。

秋季环志工作在翠湖国家城市湿地公园开展,自9月21日至10月18日,累计工作24天,环志鸟类40种677只,其中候鸟27种,留鸟13种。9月26日网捕到了国家二级重点保护动物花田鸡。花田鸡是全球易危物种,繁殖于东北亚,南迁至日本南部及中国南部越冬,国内罕见。是近年来北京地区的首次记录。

环志站在进行环志工作的同时还积极开展环志的宣传推广。首先是面向社会招募

了一批环志志愿者,跟随环志人员一同工作,观摩和学习环志技术,为北京市环志工作培养后备人才。各大媒体也对环志工作进行了相关报道,包括人民日报、北京日报和北京电视台等,让更多的市民认识和了解鸟类环志,提高环志工作的社会关注度,促进北京市鸟类环志工作更好更快地向前发展。

(北京野生动物救护中心 史洋)

2012—2013年环志鸟类回收概况

2012—2013年回收记录有42种468只,隶属7目18科,其中环志并回收的鸟类为6目15科23种50只,我国环志的鸟类在国外回收5目7科17种65只,中国回收到国外环志鸟类6目11科15种353只。回收数量居首位的是大天鹅(*Cygnus cygnus*)158只,其中156只来自于蒙古国,2只分别来自中国的新疆玛纳斯和河北南大港;回收数量居第二位的是红腹滨鹬(*Calidris canutus*)156只,其中154只来自新西兰,1只来自于澳大利亚,1只为中国上海环志在俄罗斯回收。

2012—2013年观察到彩色标记鸟类21种312只次,包括黑颈鹤1只,黄喉鹀1只,其余全部为鹬鹬类水鸟。其中,在中国境内并观察到鸟类8种16只次,中国标记鸟类在国外观察到9种49只次,中国观察到国外彩色标记鸟类16种247只次。观察数量居首位的是红腹滨鹬96只次,其中74只次是国外环志在中国被观察到,19只次是国内环志鸟类,3只次是国内环志国内观察;其次为红颈滨鹬(*Calidris ruficollis*, 53只次)和弯嘴滨鹬(*Calidris ferruginea*, 39只次)。

(全国鸟类环志中心 陈丽霞 侯韵秋 陆军)



新疆的鸟类新纪录 3 种

(中国科学院新疆生态与地理研究所 马鸣
李维东等)

2014 年 7—9 月, 在新疆又有 3 种新的鸟类被观鸟者纪录, 分别为蓝颊蜂虎 (*Merops persicus*)、鵟头蜂鹰 (*Pernis apivorus*) 和印度池鹭 (*Ardeola grayii*)。经查, 3 种均为中国鸟类新纪录。特简介如下。

(1) 蓝颊蜂虎 (*Merops persicus*), 是李维东、邢伟英、张燕伶、李国卫等人于 2014 年 7 月 16 日在新疆阿尔金山保护区拍摄的, 仅仅遇见 1 只。根据文献, 国内外都推测该物种在新疆可能有分布 (郑作新, 1976; 马鸣, 2011), 但一直没有人真正见到或拍到该物种。这次却出现在新疆的东南角——阿尔金山国家级自然保护区的依协克帕提 (90°20'E, 37°18'N, 海拔 3,900 m)。估计它是 1 只迷鸟, 实属罕见。

(2) 鵟头蜂鹰 (*Pernis apivorus*), 2014 年 8 月初, 鸟友杨庭松在新疆伊宁县伊犁河大桥附近 (81°18'E, 43°52'N, 海拔 600 m) 拍摄记录到 1 只。之前在阿尔泰、喀什等地区也有过几个记录 (邓杰等, 1995; 马鸣, 2001)。鵟头蜂鹰与凤头蜂鹰 (*Pernis ptilorhynchus*) 比较相似, 二者的分布区可能在新疆西部地区相交。

(3) 印度池鹭 (*Ardeola grayii*), 2014 年 9 月 17 日, 喀什观鸟会成员彭银星在新疆阿克陶县喀拉库勒湿地 (75°05'E, 38°23'N, 海拔 3,600 m) 拍摄到一只印度池鹭成鸟。附近的昆仑山最高峰——慕士塔格峰, 海拔 7,509 m, 素有“帕米尔之父”的美称。

滨海湿地亟待开展有效保护

我国滨海湿地是水鸟重要的栖息地, 水鸟种类占全球种类总数的 25%, 数量达数百万只。然而, 中国的滨海湿地由于过度围垦在过去半个世纪面积不断减少。目前, 沿海修建的海堤长度约占海岸线总长的 60%, 然而滨海湿地面积在过去 50 年间却减少了一半, 大面积的滨海湿地已被列入当地政府的围垦计划。这不仅对于依赖滨海湿地的水鸟及其他生物类群带来巨大威胁并造成生态系统服务的丧失, 而且也影响着沿海地区的生态安全, 最终影响到区域的可持续发展。

滨海湿地保护目前仍面临多方面的挑战, 例如缺少湿地保护的国家立法; 不同政府部门对滨海湿地多重管理并存在利益冲突; 沿海地方政府重视围垦开发在短期带来的直接经济价值, 忽视湿地保护所带来的长期、间接的价值。至今在对围垦项目进行环境影响评价时, 常常忽视了滨海湿地在生物多样性保护及生态服务方面的巨大价值。

为了加强滨海湿地保护, 需要尽快制定湿地保护的国家立法; 确定滨海湿地保护的“红线”; 湿地的围垦与利用项目需要由国家设立的专门机构统一协调管理; 对湿地围垦项目的环境影响评价需考虑不同区域多个围垦项目影响的累积效应; 需要建立湿地破坏

的问责机制；地方政府需转变发展思路，由依赖土地增量转为提升土地附加值和土地利用效率；需要加强湿地保护的宣传和教育，提升公众对湿地保护的认同。为了实现我国政府提出的“生态文明”的发展目标，各级政府都需要重视湿地的保护。

（本文于 2014 年 11 月 21 日在 Science 杂志发表。具体见：Ma Z.J. et al. (2014) Rethinking China's new great wall. Science, 346: 912-914.）

（复旦大学生命科学学院 马志军）

野鸟的迁徙模式对高致病性禽流感病毒 H5N1 在亚洲的传播与周期性爆发的影响

对 H5N1 在野鸟和家禽中的暴发记录、收集自被感染个体的病毒基因组序列以及 2003 年到 2012 年期间通过 4 个卫星追踪的野生鸟类物种的迁徙模式，综合使用病毒时空信息、候鸟追踪技术、传播速度、病毒进化、网络结构等多种因素进行分析与研究，实现了病毒溯源与传播网络的最大似然估计，揭示出在亚洲流行的禽流感 H5N1 分支 2.3.2 病毒是沿着候鸟固定迁徙路线不断进化；地理距离对沿飞行路线的病毒传播影响甚微。这表明空间距离不是阻碍飞行路线内基因转移的一个主要生态屏障。网络分析结果显示候鸟和高致病性禽流感 H5N1 病毒可能共享迁移网络，而且病毒能够沿鸟类迁徙路径进化和传播。研究结果对亚洲不同国家与地区间协调共同防控禽流感病毒具有指导意义。内容详见 Tian Huaiyu et al., PNAS, 2015, 112:172–177。

（北京 董路）

社会性单配制杂色山雀的婚外父权与配偶的遗传相容性无关

约 92% 的鸟类为社会性单配制，单配制鸟类中很多都存在婚外父权现象。杂色山雀 (*Parus varius*) 是一种社会性单配制的小型森林洞巢鸟，本研究通过对杂色山雀进行亲权鉴定以确定其遗传性婚配制度，结果显示：46.9% (15/32) 的巢存在婚外父权，14.1% (27/191) 的后代为婚外子代。说明社会性单配制的杂色山雀具有较高的婚外父权水平。在明确其存在婚外父权的情况下，进一步探究其发生原因，结果如下：(1) 有、无婚外父权巢的社会性亲本之间的遗传相似性无显著差异 ($P=0.504$)；(2) 有婚外父权巢中婚内子代和无婚外父权巢中子代的杂合度 ($P=0.118$) 以及有婚外父权巢中婚外子代与婚内子代的杂合度 ($P=0.206$) 均无显著性差异；(3) 婚内子代与婚外子代间 9 项体征指标比较，差异均不显著 ($P_s>0.05$)。综上所述，社会性单配制杂色山雀婚外父权的发生与配偶间的遗传相容性无关，还有待从其他角度进行探究。内容详见《生态学报》，DOI: 10.5846/stxb201312132947)

（辽宁大学 马锐强 张雷 常鹏 李东来
李其久 殷江霞 万冬梅）

全球变暖和人类活动促进了白头鹎的进化

白头鹎向北扩张与温度升高、栖息地变化及人口增长密切相关，为其提供了更多的都市园林和绿地，使区域扩大和种群增长。因此全球变暖和人类活动促进了白头鹎的进化。（内容详见 Wen et al., Potential Effects of Climate Change on the Chinese Bulbul (*Pycnonotus sinensis*) in China. Biologia, 2014,

69: 1625-1630)

(四川 文陇英)

多次繁殖鸟类树麻雀的 PHA 免疫反应： 睾酮水平高的雄鸟具较强的 PHA 免疫 反应？

生活史理论认为繁殖和免疫均需能量消耗，在繁殖期较强的免疫力会对繁殖产生不利影响。免疫抑制假说认为高水平的睾酮具免疫抑制作用，而近年来很多报道并不支持这一假说。尽管很多利用笼养动物来检验睾酮和免疫功能的关系，但这些结果并不能真正反映野生动物的真实状态。因此，研究野生动物的睾酮与免疫力的关系有助于更好地认识生活史理论和免疫抑制假说。前期我们发现野生多次繁殖鸟类——树麻雀 (*Passer montanus*) 的本底和应激水平睾酮在繁殖期表现出明显的变化特征，本研究进一步报道了繁殖期不同阶段的 PHA 免疫反应的变化特征，并分析 PHA 免疫反应与本底水平和应激水平睾酮的相关性。研究结果发现树麻雀的 PHA 免疫反应在第一次和第二次繁殖期具有显著变化，而雄鸟的睾酮水平与 PHA 免疫反应呈现显著正相关，而雌鸟却呈负相关，这些结果表明雌、雄树麻雀体内的睾酮生物学功能不同。内容详见 *Journal of Ornithology*, DOI:10.1007/s10336-014-1104-2)

(河北师范大学 李东明 吴跃峰)

黑顶麻雀 (*Passer ammodendri*) 窝卵投入策略

在鸟类的繁殖策略中，卵的投入及其变化是探讨的重点。雀形目鸟类许多的研究表

明，窝间卵大小的变化主要与环境温度、窝卵数、雌鸟年龄及体况、雄鸟体况等有关，窝内卵序与卵大小的变化关系也体现着鸟类采取的窝存活或窝减少策略。我们于 2010 年到 2014 年在安西极旱荒漠国家级自然保护区对黑顶麻雀的窝卵投入策略进行了研究。结果表明，黑顶麻雀一年繁殖 2 窝，第二窝的窝卵数 (5.36 ± 0.85 , $n = 237$)、卵大小 (2.64 ± 0.23 , $n = 237$)、末卵偏差值 (-1.34 ± 0.04 , $n = 216$) 和雏鸟出飞率 (0.91 ± 0.15 , $n = 167$) 都明显高于第一窝 (分别为 4.88 ± 0.74 , $n = 317$; 2.56 ± 0.22 , $n = 317$; -3.14 ± 0.04 , $n = 293$; 0.86 ± 0.21 , $n = 174$)；第一窝和第二窝期间卵形成期环境温度对卵大小和窝卵数没有显著影响；雌鸟育雏期体况也与卵大小无显著相关性；但雄鸟育雏期与窝卵数明显正相关；我们的结果也没有发现该黑顶麻雀种群窝卵数和卵大小间存在明显的权衡；5 枚卵的窝内卵大小先增后降，两窝的末卵体积均显著小于窝卵体积均值。与极旱荒漠环境生存相适应，黑顶麻雀选择明显的窝减小策略，并将有限的繁殖资源更多地投入到环境条件较好的第二窝，高投入从而获得高产。

(兰州大学生命科学学院 包新康 赵伟
刘方庆 邹小玉)

安西极旱荒漠国家级自然保护区鸟类群落 20 年变化

甘肃安西极旱荒漠国家级自然保护区目前已进行了三次综合科考：第一次 1988—1989 年、第二次 2002—2004 年、第三次 2009—2013 年。在三次科考中记录到的鸟类物种共有 151 种，其中有 44.37% (67 种) 发生了变动。各生境鸟类物种数和群落多样性指数在 3 次科考 (20 多年) 中略有升高的趋

势。鸟类物种数20多年变化不大,但是组成成分已有大的变动。最为明显的就是水域湿地生境中的赤嘴潜鸭(*Netta rufina*)和村落农田生境中的灰斑鸠(*Streptopelia decaocto*),由无到有,再到成为群落的优势种。因气候变暖,保护区鸟类区系中东洋界比例增加,有明显的分布区向西扩散的物种成分即灰斑鸠、蓝额红尾鸲(*Phoenicurus frontalis*)、小鹀(*Emberiza pusilla*)。同时也有从新疆向东扩散的种类粉红椋鸟(*Sturnus roseus*)以及高原扩散来的成分白斑翅雪雀(*Montifringilla nivalis*)。保护区20年间减少的30种鸟类中,主要为夏候鸟(43.33%)和旅鸟(46.67%),这些鸟类的分布消失随机性很大。猛禽中长耳鸮(*Asio otus*)和雕鸮(*Bubo bubo*)数量减少很多,目前已很少见到。

(兰州大学生命科学学院 包新康 赵伟;
甘肃安西极旱荒漠国家级自然保护区管理局
杨增武 杨永伟 王亮)

呼和浩特白塔国际机场五年间的鸟类动态变化

为了探究呼和浩特白塔国际机场5年间鸟类的组成、数量、多样性等方面的变化及其原因,我们于2004年11月至2005年10月与2010年11月至2011年10月,对呼和浩特白塔国际机场飞行区内的鸟类进行系统调查。将两次研究的数据进行对比,分析结果如下。1)第二次调查鸟的种类和数量与第一次相比较明显减少,其中的原因是经过生态改造,机场及其周边环境变得较单一;科学化、规范化管理使得驱鸟更加高效。这些措施使得机场对鸟类的吸引力下降,以至于机场鸟类的居留型、生态类型、食性构成等发生了改变。2)第二次调查结果显示,机场飞行区的鸟类多样性指数低;在春秋两季优

势度较高,冬夏两季优势度较低,这说明飞行区内鸟种组成较为单一,而通过调查数据可以得知,飞行区内的鸟种主要为喜鹊、麻雀和乌鸦等不易驱赶的伴人鸟种。这一结果表明,飞行区针对鸟类的环境治理取得了不错的效果。但需要注意的是伴人鸟种的防范仍是该机场鸟击防范的重点之一。3)机场是特殊的空间,不容许鸟类大量存在,但对于大生态环境而言,机场干扰了鸟类正常生存,减少了鸟类多样性。如何做到既能保证飞行安全,又能让鸟类主动远离飞行区领域,人性化驱鸟,是机场工作人员下一步需要探究的问题。

(内蒙古大学 王维 杨贵生 梁晨霞)

内蒙古大青山发现长尾山椒鸟

2013年9月13日,在内蒙古乌兰察布市卓资县红召乡九龙湾(属于阴山山脉大青山分支,41°02.881'N,112°02.922'E,海拔1,526 m)调查鸟类时,发现60只颜色艳丽的小鸟在山谷溪沟南边的山坡疏林及灌丛活动、觅食。发现该鸟栖息的生境为山谷溪沟南边山坡的疏林及灌丛,树种主要有山荆子(*Malus baccata*),山杨(*Populus davidiana*),白桦(*Betula platyphylla*),旱榆(*Ulmus glaucescens*)等。经对拍摄的照片进行鉴定,确定为长尾山椒鸟(*Pericrocotus ethologus*)。为内蒙古鸟类分布新纪录。

(内蒙古大学 梁晨霞 杨贵生)

线粒体基因并系性的成因检验-台湾钩嘴鹛的线粒体袭夺致棕颈钩嘴鹛的线粒体基因树并系性。

线粒体基因树上的物种水平并系性是分

类学和系统学中的一个常见问题。这一问题可有多种解释,但目前的方法不易将其进行区分。本研究基于 4 个线粒体基因和 9 个核基因,使用多种统计方法解析棕颈钩嘴鹟线粒体基因树上并系性的成因。线粒体系统发育分析揭示棕颈钩嘴鹟相对于台湾钩嘴鹟为并系群,而核基因却支持二者的姐妹群关系。溯组模拟分析暗示这一并系性很可能由台湾钩嘴鹟对棕颈钩嘴鹟的线粒体袭夺导致。进

一步的近似贝叶斯分析暗示两物种自更新世后期分化以来,存在由棕颈钩嘴鹟向台湾钩嘴鹟的显著水平的单向基因流。研究中我们列举了线粒体渐渗和核基因渐渗结果相异的可能原因。本研究强调多基因数据在物种界定中的优势,以及检验线粒体基因树上物种水平并系性成因假说的重要性。内容详见 Feng Dong et al. 2014. *Molecular Ecology*.

(云南 董锋 杨晓君; 台湾 李寿先)

国内动态



广州市青少年观鸟登上大雅之堂

2014 年下半年,广州市成功举行了“2014 年广州青少年观鸟科普知识电视大赛”。大赛由广州市科学技术协会、广州市全民科学素质工作联席会议办公室主办,广州市青少年科技中心承办,广州市 113 号鸟舍协办。大赛获得了广州博冠光电科技股份有限公司鼎力支持和广州市大学生飞羽志愿者团队大力协助。54 所学校的 72 个代表队参加了比赛。本次竞赛形式新颖,全部赛事在广州青少年科普互动大舞台演播厅进行,由广州市电视台全程录制、编辑、播放。这种竞赛方式既

能让观鸟选手们在电视荧屏上一展风采,又能向大众充分展示鸟之魅力,更好地广泛地推动民间的观鸟活动。比赛的设计以引导学生走进自然,观赏野生鸟类,关注鸟类的生存环境为宗旨,内容包括基础的鸟类分类知识和鸟种辨别,鸟种的形态结构与功能、生态习性与行为特点,分布与迁徙,常见的鸟类声音的辨识、有关户外观鸟的安全、着装、设备操作等常识,以及鸟类与人类的文化、艺术、音乐等相关内容。题目素材如鸟的图形、视频、声音素材均采于野外,形象逼真,也弥补了室外比赛的机会不均等缺陷。

(广东 吴碧云 廖晓东)

国际动态



第二届热带生物学会亚洲分会年会

第二届热带生物学会亚洲分会年会 (Asia-Pacific Chapter Annual Meeting 2015) 将于 2015 年 3 月 30 日—4 月 3 日在柬埔寨首都金边市举行。这次大会由金边皇家大学、生物多样性研究所和当地非政府组织共同主办, 会议的主题是“未来亚洲热带生物研究的挑战”, 为进行热带鸟类研究的中国鸟类学者提供了与国际学者交流的机会。摘要提交和早期会议注册的最后截止时间是 2015 年 1 月 31 日。更多信息请参考会议的网站是 <http://tropical-biology.org/ap2015/>。

(刘阳)

第二届东南亚鸟类学会议

第二届东南亚鸟类学会议 (2nd International Ornithological Congress of Southeast Asia) 将于 2015 年 7 月 23—25 日在泰国东

北部的孔敬市举行。这次大会由泰国孔敬大学环境科学系主办, 会议的主题是“确定东南亚鸟类学的优先级”, 将会设立东南亚鸟类的生态、进化和保护等分论坛。由于中国与很多东南亚国家比邻, 中国和东南亚的鸟类学者在保护、系统分类等研究领域有很多共同的兴趣, 这次会议将为双方创造更多的合作机会。摘要提交和早期会议注册的最后截止时间分别是 2015 年 1 月 30 日和 2015 年 3 月 30 日。请参考会议的网站: <http://www.sc.kku.ac.th/iocsea2015/index.html#>

(刘阳)

第十届欧洲鸟类学大会

第十届欧洲鸟类学大会将于 2015 年 8 月 24—28 日在西班牙 Badajoz 召开, 摘要提交的截止日期为 2015 年 3 月 27 日, 详细信息请查阅 www.eou2015science.org。

(海南 梁伟)



《内蒙古动物志》第四卷

由旭日干院士、邢莲莲和杨贵生教授主编的《内蒙古动物志》第四卷将在 2015 年 1 月出版。该志书共 6 卷。本卷为第四卷（雀形目），分总论和各论两部分，总论包括内蒙古雀形目鸟类的种类和分布、内蒙古雀形目鸟类概述及摘要。各论包括内蒙古迄今所记录到的雀形目鸟类 227 种，记述了各科及属的形态特征、地理分布，对各种的鉴别特征、形态、分类讨论及亚种分化、生态、居留型、与人类的关系、种群状态与保护及地理分布等做了较为详细的记述。书中还记载了鸟类的蒙文名、英文名及别名，附有每种鸟的形态图及地理分布图。

本书是一部比较系统的动物学专著，可供动物学研究人员、高等院校有关专业师生、野生动物保护管理机构以及农、林、牧、医、机场、电力、外贸、环境评价等部门的工作人员阅读参考。

（内蒙古大学 杨贵生 梁晨霞）

《Avian Research》创刊

由中国动物学会鸟类学分会和北京林业大学共同主办的英文鸟类学学术期刊《Avian Research》（ISSN 2055-6187, eISSN 2053-7166, CN10-1240/Q）已于 2014 年 10 月创刊。

该刊由 Springer 出版集团旗下的 BioMed Central 以开放获取（Open Access）形式出版。刊物使用 Springer 开发的 Editorial Manager 投审稿系统。自 2014 年 7 月该系统于投入使用至今，已陆续收到国内外作者的投稿。稿件的处理费（Article Processing Charge, APC）由北京林业大学承担，作者无需支付任何费用。

《Avian Research》主要发表涵盖鸟类学各个领域的研究论文和高质量的综述。了解刊物详情及投稿请访问 www.avianres.com。

（Avian Research 编辑部 程朋军）



第十三届全国鸟类学术研讨会第一轮通知

中国是世界上鸟类多样性最丰富的国家之一，近年来我国鸟类学研究和保护工作取得突飞猛进的发展。经中国动物学会鸟类学分会于2014年8月在曲阜召开的常务理事扩大会议讨论决定，我分会将于2015年11月13日至15日在安徽省合肥市召开“第十三届全国鸟类学术研讨会”。本次会议由中国动物学会鸟类学分会主办，安徽大学、安徽动物学会单位承办，研讨会前还将举办“第十一届全国鸟类学研究生翠鸟论坛”。本届研讨会是继2013年杭州举办的“第十二届全国鸟类学学术研讨会”后，我国鸟类学界的又一次盛会。

一、会议主题：鸟类的生态与进化研究。

二、会议安排

1. 时间：2015年11月13—15日

2015年11月12日报到，13—15日为学术报告。16—18日为野外考察。会议详细日程安排将在第二轮通知中予以说明。

2. 地点：安徽省合肥市安徽大学磬苑校区（新校区，位于合肥市经济技术开发区九龙路111号）。

3. 费用：会议期间各位代表的食宿费用和会后考察费用自理，会议注册费见表1。

本届研讨会规定的语言为中文，所提交的论文摘要、报告ppt和墙报均应为中文。大会将组织大会特邀报告，设立专题报告会和圆桌讨论会，并在黄金时间设立墙报交流单

元（每个单元60分钟），要求墙报提交者届时在自己墙报边讲解并回答会议代表的问题。本届大会继续设立优秀墙报奖。

大会报告由组委会特邀。专题讨论会的时间单元为120分钟，由5个20分钟的报告和20分钟的专题讨论构成。圆桌讨论会的时间单元为60分钟。专题报告会和圆桌讨论会的主持人应为来自两个不同单位的代表，申请时需要提交800~1,000字的摘要。专题讨论会申请时需阐述该专题的学术意义、重要性等，并提出所邀请的报告人和报告题目（申请时应至少明确3名报告人）。圆桌讨论会需说明讨论会的题目，并在摘要中说明所讨论的主要议题及意义。专题讨论会和圆桌讨论会由与会代表先期报名申请，请将申请发给孙悦华研究员（sunyh@ioz.ac.cn），截止时间为2015年4月30日。

提交论文摘要的截止日期为2015年6月30日。摘要字数在350~500字，包括题目（中英文），作者，单位（含地址及邮编），摘要正文，

表1 第十三届全国鸟类学术研讨会会议注册费

早期注册 (2015年6月30日前)	正常注册 (2015年7月1日—9月30日)	现场注册
会员代表 ¥1000	会员代表¥ 1400	会员代表 ¥1800
非会员代表¥ 1200	非会员代表¥ 1600	非会员代表¥ 2000
学生代表 ¥700	学生代表¥ 1000	学生代表 ¥1300

关键词。论文摘要通过电子邮件或网上递交。提交论文摘要时,请明确说明该论文是申请口头报告还是墙报。本届研讨会前将出版会议报告摘要集,用于会上交流。

本届研讨会的会议地点位于安徽大学磬苑校区的小礼堂和博学南楼,住宿酒店包括校园内的磬苑宾馆等,有关信息将在第二轮会议通知中具体列出。请随时关注鸟类学分会网站 www.chinabird.org 的有关信息,以便及时在中国动物学会网站上注册和预订宾馆。

在本届学术研讨会之前(2015年11月12—13日)将举办“第11届翠鸟论坛”,具

体事宜请关注鸟类学分会网站 www.chinabird.org。

本届会议将继续进行“中国鸟类基础研究奖”、“中国鸟类学研究生学术新人奖”的评奖。本届鸟会将举办鸟类摄影比赛,欢迎所有参会代表将鸟类影像和鸟类研究工作的照片向大会投稿。

欢迎全国各研究单位、大专院校、博物馆、动物园、自然保护区和野生动物管理部门等单位的鸟类学科技工作者和研究生报名参会。

(学会秘书处)

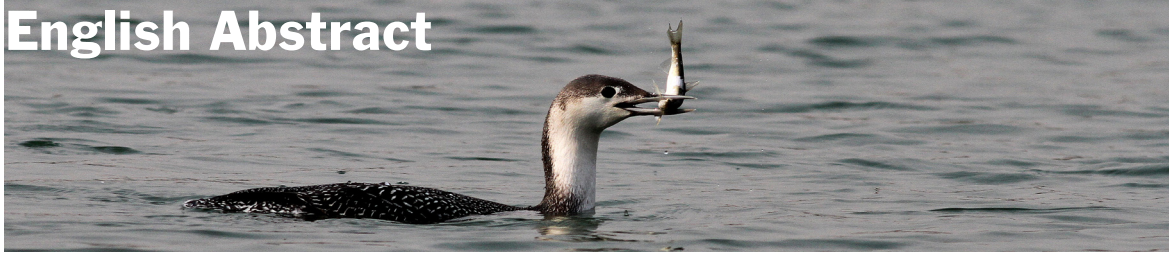


栗鸢(*Haliaeetus leucorhynchos*)为中型猛禽。体长36~51厘米。虹膜为褐色或红褐色,头、颈、胸和上背白色,其余体羽和翅膀均为栗色。主要栖息于江河、湖泊、水塘、沼泽、沿海海岸和邻近的城镇与村庄。除繁殖期成对和

成家族群外,通常单独活动。活动在白天。常单独在湖滨、海滨、河岸或水域与村庄上空长时间地翱翔和滑翔。主要以蟹、蛙、鱼等为食。

封面照片由沈俊杰2013年3月摄于西藏。

English Abstract



Meeting Notes

The 17th Congress of China Zoological Society and the 80th anniversary ceremony was held in Sun Yat-sen University

The Congress was held in Guangzhou November 17–20, 2014. The congress was hosted by China Zoological Society, and sponsored by Guangdong Zoological Society, Institute of Endangered Wildlife of Guangdong, Sun Yat-sen University and Guangzhou Zoo. More than 700 delegates attended the congress, and 210 of them contributed talks.

The 2014 meeting of the executive directors of the China Ornithological Society of China Zoological Society was held at Qufu Normal University

The executive director meeting of China Ornithological Society of China Zoological Society was held in Qufu Normal University on August 3rd, 2014. The meeting attendants included academician Guangmei Zheng, and directors Fengqin Wang, Fawen Qian, Qing Chang, Zihui Zhang, and Yuewei Yang. Professor Daojian Sai of the Shandong Normal University, Pengjun Cheng of the editorial office of *Avian Research*, Dr. Chunlin Li of Anhui Normal University also attended the meeting.

The 26th International Ornithological Congress was held in Rikkyo University, Japan

A total of 1134 ornithologists from 63 countries attended the congress. About 30 ornithologists and students from China attended the congress and contributed to the plenary talks, symposia, oral sessions, round table discussions, and poster sessions.

The 10th Kingfisher Forum was held in Beijing Normal University

The Tenth Kingfisher Forum of China young ornithologists tenth was successfully held at Beijing Normal University during August 14–16, 2014. The forum is organized by the China Ornithological Society, hosted by the College of Life Sciences, Beijing Normal University, and cosponsored by the Zoological Society of Beijing, Beijing Zoo, and the Key Laboratory for Biodiversity and Ecological

Engineering of the Ministry of Education. Over 100 young ornithologists attended the forum.

The 16th meeting of the Goose Specialist Group was held in Beijing

The 16th meeting of the Goose Specialist Group was held in Beijing during November 22–25, 2014. The meeting was organized by IUCN-SSC and the Goose Specialist Group of Wetlands International, hosted by the Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences, and financially supported by National Natural Science Foundation of China, BirdLife International and Research Center for Eco-Environmental Sciences of the Chinese Academy of Sciences. The major responsibilities of Goose Specialist Group include compiling results of research progresses on geese and understanding distributions of Palearctic geese to assist management and decision making of governments and to promote international collaboration.

Among the nine waterbird flyways, East Asian-Australasian Flyway is considered as one of the most threatened, as the result of the growing human population and economic development, where more than 50% waterbird populations are declining. China lies in the central position in this flyway. The 16th Meeting of the Goose Specialist Group was held in China to promote research and conservation of geese in this flyway.

More than 100 delegates from United Kingdom, Netherlands, Denmark, Russia, Australia, Japan, South Korea, Mongolia and China attend this meeting. The meeting was comprised of 11 topics, 8 keynote lectures and 45 oral presentations. The meeting focused on three areas: (1) status, threats and conservation of geese in East Asian-Australasian Flyway and the world; (2) research progresses in geese including Swan Geese, Lesser White-fronted Geese, Greater White-fronted Geese and Bar-headed Geese; and (3) progresses of geese studies in the Yangtze floodplain.

Delegates discussed status and conservation of geese in East Asian-Australasian Flyway and compared it with that in Europe and North America. A research and monitoring network for geese in East Asian was proposed, which will set a solid basis for future research and conservation collaboration.

The academic committee of this meeting was chaired by Bart Ebbinge (Netherlands), and includes Anthony Fox (Denmark), Lei Cao (China), John Takekawa (USA), Matsayuki Kurechi (Japan) and Ray Alisauskas (Canada). The 17th Meeting of the Goose Specialist Group will be held in Russia in November 2015.

(Lei Cao)



Group photo of participants to the 16th meeting of the Goose Specialist Group

Pheasant Research

Was the exposed continental shelf a long-distance colonization route in the ice age? The Southeast Asia origin of Hainan and Taiwan partridges

Research on island biotas has greatly contributed to the development of modern evolutionary and biogeographic theories. Until now, most studies have suggested that continental islands received their biotas directly from the adjacent mainland. However, only a few studies have indicated that species on continental islands might originate from other distantly non-adjacent regions. Here, we used the hill partridges (genus *Arborophila*) that are widely distributed in the southwest and southeast China mainland, Indochina, Hainan and Taiwan islands to test whether species on continental islands might originate from distant regions rather than the adjacent mainland. Based on molecular phylogenies inferred from three mitochondrial fragments and three nuclear introns, together with ancestral area reconstruction, we found that the ancestors of the endemic Hainan and Taiwan partridges (*A. ardens* and *A. crudigularis*) likely originated from Indochina, rather than the nearby southeast China mainland. The divergence time estimates demonstrate that their ancestors likely colonized Hainan and Taiwan islands using the long exposed continental shelf between Indochina, Hainan and Taiwan islands during glacial periods, which had not been demonstrated before. Thus, integrating distribution data with phylogenetic information can shed new lights on the historical biogeography of continental islands and surrounding mainland regions.

(De Chen, Jiang Chang, Shou-Hsien Li, Yang Liu, Wei Liang, Fang Zhou, Cheng-Te Yao and Zhengwang Zhang)

Waterbird Research

Three Synchronized Counts for Migratory Cranes and Waterbirds in autumn 2014 were carried out.

The Synchronized Counts for the cranes and waterbirds this autumn occurred on September 24, October 17, and October 31, 2015. The areas covered included the wetlands from Hulunbeier and Sanjiang Plain to Yellow River Delta. In total we surveyed 124 sites of 36 wetlands. We recorded 218 species belonging to 17 orders, 50 families. In addition, on November 9, over 30 volunteers including bird watchers and researchers from nature reserves and universities did a synchronized count for the Oriental Stork and other waterbirds in 19 wetlands including river estuaries, coastal wetlands, reservoirs around Bohai Bay Area and two lakes in the lower reach of the Yangtze River. In total we recorded more than 1465 Oriental Storks

On September 24, we recorded 102 Red-crowned Cranes (6 chicks), 7 Hooded Cranes, 48 White-naped Cranes, 1 Demoiselle Crane, 287 Eurasian Cranes, 176 Oriental Storks, 1 Black Stork, 14 Great Bustards, 15 Whooper Swans, 306 Tundra Swans, 3 Mute Swans, 123 Swan Geese, 6,366 Bean Geese, 16 Greater White-fronted Geese, 120 Greylag Geese, 518 Ruddy Shelducks, 921 Common Shelducks, 479 Eurasian Wigeons, 713 Falcated Ducks, 6,438 Gadwalls, 3,533 Common Teals, 6,139 Mallards, 4,015 Indian Spot-billed Ducks, 32 Northern Pintails, 30 Garganeys, 2,055 Northern Shovelers, 396 Common Pochards, 3,026 Tufted Ducks, 144 Greater Scaups, 3,211 Common Goldeneyes, 14 Smews, 11 Red-breasted Mergansers, 46 Goosanders, 412 Little Grebes, 533 Great Crested Grebes, 37 Black-necked Grebes, 387 Great Cormorants, 503 Grey Herons, 43 Purple Herons, 431 Great White Egrets, 15 Intermediate Egrets, 338 Little Egrets, 12 Cattle Egrets, 15 Chinese Pond-herons, 1,128 Black-crowned Night-herons, 13 Eurasian Bitterns, 272 Eurasian Spoonbills, 3 Baillon's Crakes, 119 Common Moorhens, 4,836 Common Coots, 1,900 Eurasian Oystercatchers, 317 Black-winged Stilts, 1,382 Pied Avocets, 21 Oriental Pratincoles, 1,494 Northern Lapwings, 47 Grey-headed Lapwings, 3,706 Grey Plovers, 6 Little Ringed Plovers, 25,821 Kentish Plovers, 3 Pintail Snipes, 240 Black-tailed Godwits, 8,240 Bar-tailed Godwits, 69 Little Curlews, 24 Whimbrels, 384 Eurasian Curlews, 3,275 Far Eastern Curlews, 57 Spotted Redshanks, 4,699 Common Redshanks, 7 Marsh Sandpipers, 3,552 Common Greenshanks, 2 Green Sandpipers, 28 Terek Sandpipers, 162 Sharp-tailed Sandpipers, 12,836 Dunlins, 2,662 Black-tailed Gulls, 129 Mew Gulls, 1,084 European Herring Gulls, 32 Caspian Gulls, 15 Slaty-backed Gulls, 5,099 Black-headed Gulls, 11,243 Saunders's Gulls, 8 Common Gull-billed Terns, 128 Caspian Terns, 406 Common Terns, 348 Little Terns, 70 Whiskered Terns, 214 White-winged Terns, 5 Common Kingfishers, and 1,180 unknown ducks and other birds.

On October 17, we recorded 136 Siberian Cranes (22 chicks), 49 Red-crowned Cranes (2 chicks), 25 White-naped Cranes, 15 Oriental Storks, 16 Whooper Swans, 5,150 Bean Geese, 1,057 Greylag Geese, 779 Ruddy Shelducks, 40 Common Shelducks, 4 Mandarin Ducks, 7 Eurasian Wigeons, 76 Falcated Ducks, 325 Gadwalls, 708 Common Teals, 1,786 Mallards, 345 Indian Spot-billed Ducks, 8 Northern Pintails, 45 Garganeys, 160 Northern Shovelers, 36 Common Pochards, 1,676 Tufted

Ducks, 27 Greater Scaups, 554 Common Goldeneyes, 4 Goosanders, 7 Little Grebes, 4 Red-necked Grebes, 149 Great Crested Grebes, 31 Great Cormorants, 68 Grey Herons, 5 Purple Herons, 102 Great White Egrets, 2 Cattle Egrets, 2 Eurasian Bitterns, 128 Eurasian Spoonbills, 29 Common Moorhens, 4,288 Common Coots, 18 Spotted Redshanks, 8 Mew Gulls, 80 European Herring Gulls, 2 Pallas's Gulls, 298 Black-headed Gulls, 78 Common Terns, 45 Little Terns, 97 White-winged Terns, 7,910 unknown Ducks, 10 unknown snipes, and 357 unknown gulls and other birds.

On October 31, we recorded 15 Siberian Cranes (2 chicks), 48 Red-crowned Cranes, 6 Hooded Cranes, 38 White-naped Cranes, 18 Eurasian Cranes, 242 Oriental Storks, 21 Whooper Swans (1 chick), 6 Swan Geese, 998 Bean Geese, 147 Greater White-fronted Geese, 49 Ruddy Shelducks, 2 Common Shelducks, 6 Eurasian Wigeons, 29 Falcated Ducks, 548 Gadwalls, 520 Baikal Teals, 822 Common Teals, 3,197 Mallards, 243 Indian Spot-billed Ducks, 167 Northern Pintails, 7 Garganeys, 167 Northern Shovelers, 68 Common Pochards, 2,225 Tufted Ducks, 84 Greater Scaups, 2 Velvet Scoters, 742 Common Goldeneyes, 4 Red-breasted Mergansers, 142 Goosanders, 9 Scaly-sided Mergansers, 32 Little Grebes, 396 Great Crested Grebes, 6 Great Cormorants, 109 Grey Herons, 12 Purple Herons, 130 Great White Egrets, 4 Little Egrets, 1 Eurasian Bittern, 1,790 Common Coots, 67 Northern Lapwings, 9 Mew Gulls, 196 European Herring Gulls, 393 Black-headed Gulls, 72 unknown geese, 6,009 unknown ducks, and 368 unknown gulls and other birds.

Because some sites have not submitted their data or did not do the survey on the specified dates, we excluded them from this report, the numbers of birds reported here are likely an underestimate of the actual numbers.

Compared to the spring, both the numbers of wetlands surveyed and participants increased this autumn, and the data were collected in a more standard method than that in the past.

(Liying Su and Lifang Tang)

The wetland of Luyang Lake, Shaanxi, China – an internationally important site for shorebirds

The Luyang Lake wetlands are located in the southwest of Pucheng County, Weinan City, Shaanxi Province of northwestern China (34°47'49"N, 109°26'37"E – 34°49'14"N, 109°34'29"E). The Luyang Lake wetlands are situated in a low (elevation 369–440 m) waterlogged depression and comprise artificial saltpans, ponds, and reed beds. The saltpans were established over three hundred years ago, cover 660 ha (>80%) of the wetlands, and support a small salt harvesting industry. Due to this industry, water levels and salinity levels vary across the wetlands throughout the year, and the wetlands provide seasonal food (including brine shrimp *Artemia* and brine flies *Ephydriidae*) and roosting resources for a range of migratory shorebirds.

Since 2012, a total of 36 species of shorebirds have been recorded in the Luyang Lake wetlands.

For at least three wader species, the Luyanghu saltpans satisfy international criteria, confirming they are critical habitats for these species. The numbers of Spotted Redshank (*Tringa erythropus*), Long-billed Plover (*Charadrius placidus*) and Black-winged Stilt (*Himantopus himantopus*) exceed 1% of East Asian-Australasian Flyway populations, satisfying Ramsar Criterion 6 as a 'Wetland of International Importance'. At least five species, Kentish Plover (*Charadrius alexandrinus*), Little Ringed Plover (*Charadrius dubius*), Oriental Pratincole (*Glareola maldivarum*), Grey-headed Lapwing (*Vanellus cinereus*) and Black-winged Stilt (*Himantopus himantopus*) also breed in the wetlands. Most recently, many non-breeding shorebirds have been observed in the saltpans, confirming that Luyang Lake is also important for migrating or molting birds during non-breeding seasons. These data suggested that the Luyang Lake is a newly documented and globally important feeding and roosting site for waterbirds in the East Asian-Australasian Flyway.

(Lei Luo and Xuebin Gao, Shaanxi)

Low nest survival of a breeding shorebird at Bohai Bay, China

Nest survival plays an important role in avian demography because of its influence on both individual fitness and population growth. It is also known to vary within species due to local factors such as climate, predation, substrate, and disturbance, among others. Therefore, an understanding of the relative influence of local factors on nest survival is of critical importance for the formulation of appropriate avian conservation and management policies/programs. Over the past 50 years the Yellow Sea has lost almost 65% of its original intertidal habitats due to land reclamation and development. There has also been a concomitant and rapid decline in the populations of Kentish plover (*Charadrius alexandrinus*) in East Asia, but the proximate causes of this decline are poorly understood. To gain a better understanding of this conservation issue, we investigated Kentish plover nest survival at Bohai Bay, China, using Program MARK to model the daily survival rate (DSR) of 417 nests. We found that the nest survival rate at Bohai Bay [0.925 ± 0.004 ($\pm 95\%$ confidence interval)] is the lowest reported worldwide for this species. The most common cause of nest failure was related to anthropogenic disturbance. We determined that nests at salt crystallization habitat had the highest hatching success and that initiation date, nest age, and nest density had quadratic effects on DSR. We believe that if low nest survival persists for consecutive years, fecundity will unlikely compensate for adult mortality, which will result in dramatic population declines of plovers at Bohai Bay. We therefore recommend that the local government managers who are responsible for local environmental management act accordingly to create protected alternative nesting habitat for plovers in this region.

(Pinjia Que, Yajing Chang, Luke Eberhart-Phillips, Yang Liu, Tamás Székely and Zhengwang Zhang)

Poisoned White-naped Cranes were rescued, released and arrived at Poyang Lake successfully

Six White-naped Cranes were found poisoned in farmland at Zhangzhai Village, Guotun Town, Yanggu County, Shandong Province by local farmers on October 30, 2014. Of the six birds, one adult died, and the other adult had a broken toe. Although alive, the rest four cranes showed the effects of pesticide poisoning and had difficulties to stand, eat and drink. One of these four was an adult with a cellular tracking device, suggesting that the bird was caught and banded by International Crane Foundation (ICF), Wildlife Science and Conservation Center of Mongolia (WSCC) and Beijing Forestry University (BFU) in Mongolia in August 2014, as part of a study to assess threats and identify and protect habitats used during migration. These cranes were poisoned by feeding on planted seeds of winter wheat treated with pesticides, a farming practice commonly used in China. Staff from Yanggu County Forestry Bureau went to the scene immediately after receiving information from the farmers. They took the cranes to the rescue station at Liaocheng for treatment. After a period of recovery, four cranes were released on November 11 in a field near where they were discovered. In early December, these cranes arrived at Poyang Lake successfully, although they were about one month later than most other White-naped Cranes.

The time for planting winter wheat in Northern China overlaps with the migration period for White-naped Cranes and many other migratory birds. To protect seeds from pests in the soil, farmers often mix seeds with pesticides (commonly carbendazim and phorate). The pesticides become harmless after two months or after rain washes off the chemicals. The farmlands in the area are very critical for migratory birds to supplement energy reserves, but the seeds coated with highly poisonous pesticides are dangerous for these birds. It is urgent, therefore, to have a better understanding of migration pattern of these birds and to minimize the threats of these poisonous seed to migrants.

(Shengwu Jiao, Guangchun Lei, Beijing Forestry University; Fengshan Li and Claire Mirande, International Crane Foundation; Nyambayar Batbayar, Wildlife Science and Conservation Center of Mongolia; Tao Wang, Liaocheng Forestry Bureau; Juan Cui, Yanggu Forestry Bureau)

Bird Banding Research

Recapture of the banding birds between China and other countries

Since 1983, We started working on birds banding, so far, the banding-recovery birds covers 23 countries. We recaptured and re-sighted ring birds from 14 countries in China, which are Australia, New Zealand, Mongolia, Russia, South Korea, Sweden, Japan, Kazakhstan, India, the United States, India, Norway, Finland, Malaysia and Philippines.

There are 20 countries have recaptured or re-sighted banded birds from China, which are Japan, Australia, Russia, South Korea, India, Malaysia, Korea, Thailand, Mongolia, the Netherlands, Laos, Indonesia, the United States, Bangladesh, Norway, Sweden, New Zealand, Vietnam, myanmar, the Solomon Islands.

There are in total of 111 species were international recaptured or resigned, mainly water birds and some passerine birds. The Great Knot are the most, which 90 records banded in China and re-sighted abroad and 382 records banded in foreign countries and re-sighted in China. The second most species of the banding-re-sighting bird was Whooper Swans. There are 464 individuals observed in China, mainly banded in Mongolia.

(Lixia Chen, Yunqiu Hou and Jun Lu, National Bird Banding Center of China)

Bird banding newsletter about Xinqing bird banding station in 2014

Bird banding was conducted in Xinqing bird banding station this year from 20th March to 17th November, lasted 150 days. A total of 23,254 birds of 82 species were banded. 1,023 birds were recaptured and 42 birds were back to home. There is a new record Ochre-rumped Bunting (*Emberiza yessoensis*). Our station recaptured 4 birds from other stations, which were 2 Common Redpoll (*Carduelis flammea*) (A116-2038 and A116-2028) from Shangzhi Maoershan bird banding station, one Long-tailed Tit (*Aegithalos caudatus*) (A89-2548) from Qingfeng bird banding station and one Rustic Bunting (*Emberiza rustica*) (B150-9598) from Laotieshan of Dalian.

There were five species more than 1000 were banded, that were Common Redpoll (*Carduelis flammea*) ($n = 12,697$), Rustic Bunting (*Emberiza rustica*) ($n = 2,951$), Chaffinch (*Fringilla montifringilla*) ($n = 1,267$), Pallas's Rosefinch (*Carpodacus roseus*) ($n = 1,103$), Hawfinch (*Coccothraustes coccothraustes*) ($n = 1,086$).

Since 2007 when the station started to band bird, a total of 329,632 birds of 185 species, 41 families, 13 orders had been banded.

According to the banding data during seven years, the biggest change is the number of Common

Redpoll. From 2007 to 2010, the annual number of the Common Redpoll was more than five thousand. However, in 2011 and 2012, the annual number of the Common Redpoll was only in more than a dozen to one thousand. But in 2013 and 2014, the annual number has broken the tens of thousands.

(Linxiang Hou and Hongwei Li, Xinqing bird banding station)

Bird banding newsletter about Laotieshan bird banding station in 2014

Bird banding was conducted in Laotieshan bird banding station in autumn from 10th September to 10th November, lasted 61 days. A total of 5,632 birds of 58 species were banded, including 91 were rescued and 337 raptors. The most day is October 23th, when 529 birds of 12 species were banded. There were seven species more than 100, which are Great Tit (*Parus major*) ($n = 1,541$), Eurasian Siskin (*Carduelis spinus*) ($n = 1,211$), Brambling (*Fringilla montifringilla*) ($n = 748$), Yellow-throated Bunting (*Emberiza elegans*) ($n = 616$), Yellow-bellied Tit (*Parus venustus*) ($n = 506$), Red-flanked Bush Robin (*Tarsiger cyanurus*) ($n = 262$), Japanese Sparrow Hawk (*Accipiter gularis*) ($n = 183$). We also recaptured 274 birds, including one from other bird banding station.

On October 14th and 15th, 2014, two Common Buzzards (*Buteo buteo*) were banded with metal and color bands and harnessed with GPS trackers. So far, both of them were successfully finished their fall migration, one of them arrived at Zhenjiang of Jiangsu Province and the other arrived at Nanchang of Jiangxi Province.

(Xiaoping Wang, Liaoning Shedao Laotieshan National Nature Reserve)

Banding and GPS Tracking of Siberian Cranes and White-naped Cranes

Oct 19–21, 2014, five rescued Siberian Cranes were banded with metal and color bands and harnessed with GPS trackers by National Bird Banding Center of China, Xianghai National Nature Reserve and Momoge National Nature Reserve. These five Siberian Cranes successfully finished their fall migration from northeast China, three of them arrived at Poyang Lake, one arrived at the coast area of Jiangsu Province, the other one arrived in Jiangxi, but unfortunately dead with unknown reason.

On Nov. 11, 2014, three White-naped Cranes were banded released to the wild in Shandong Province. The three cranes were found flightless because of feeding of poisoned wheat seeds on Oct. 28 by local farmers. Liaocheng Forestry Bureau gave good care to the three cranes, and after days later, with the checking of health condition, they were banded with metal and color bands and harness with GPS trackers. Two of them arrived at Poyang Lake successfully for winter, one of them was shot dead after released to the wild.

(Fawen Qian, National Bird Banding Center of China)

Bird banding news about Gaofeng bird banding station in 2014

Bird banding was conducted in Gaofeng bird banding station in Spring from 15th March to 3rd June, lasted 81 days; in Autumn from 15th August to 20th November, lasted 98 days.

A total of 6,606 birds of 88 species were banded, including 1,720 birds of 65 species in spring and 4,886 birds of 78 species in autumn. Since 1998 when the station started to band bird, a total of 227 species of 17 orders and 48 families were found and 279,035 birds of 181 species 43 families 15 orders were banded.

According to the number of banding birds, the population of the birds is reduced year by year and it is the least number in 2014 since 2001. In spring, there are only three species more than 100, which are Red-flanked Bush Robin (*Tarsiger cyanurus*) ($n = 462$), Yellow-browed Warbler (*Phylloscopus inornatus*) ($n = 324$) and Eurasian Siskin (*Carduelis spinus*) ($n = 123$).

In autumn, there are six species more than 100, which are Common Redpoll (*Carduelis flammea*) ($n = 2,355$), Little Bunting (*Emberiza pusilla*) ($n = 452$), Yellow-browed Warbler (*Phylloscopus inornatus*) ($n = 235$), Eurasian Bullfinch (*Pyrrhula pyrrhula*) ($n = 130$), Red-flanked Bush Robin (*Tarsiger cyanurus*) ($n = 118$), Pallas's Leaf Warbler (*Phylloscopus proregulus*) ($n = 103$).

On 5th Aug. 2014, we rescued a hurt Oriental White Stork, after feeding more than 20 days, the bird recovered. We banded it with a GPS tracker and the bird had arrived at Tianjin Beidagang reservoir safely. On November 9th, it was taken photo clearly during synchronous survey.

(Xianda Li and Kejian Fang, Gaofeng bird banding station)

Bird banding news of Dongzai National Nature Reserve

It has been carrying out the bird banding more than 10 times and lasted 3 months in 2014 in Dongzai National Nature Reserve, a total 5,576 birds of 87 species, 25 families, and eight orders were banded. Among the banding birds, there were 659 birds of 37 species were recaptured. Besides, there are 16 birds of six species returned home, which were one Chinese Goshawk (*Accipiter soloensis*), seven Hair-crested Drongo (*Dicrurus hottentottus*), two Black-faced Buntings (*Emberiza spodocephala*), two Daurian Redstart (*Phoenicurus aureoreus*), three Yellow-throated Bunting (*Emberiza elegans*) and one Red-flanked Bush Robin (*Tarsiger cyanurus*).

(Dongzai National Nature Reserve)

Bird banding news letter about Beijing bird banding station in 2014

In 2014, a total of 247 rescued wild birds of 45 species were banded, five birds of two species are

the National first level and 80 birds of 16 species are the National second level in conservation.

In spring, bird banding were conducted from late March to mid-May in the West Mountain National Forest Park and Cui Lake National Wetland Park, lasted 16 days. A total of 146 birds of 25 species were banded, including 16 species are migration and eight species are resident.

In autumn, Bird banding were conducted from September 21st to October in the Cui Lake, lasted 24 days. A total of 677 birds of 24 species were banded, including 27 species are migration and 13 species are resident. On September 26th, we found a Swinhoe's Rail (*Coturnicops exquisitus*) which is vulnerable species in IUCN Redlist. Swinhoe's Rail breeding in east north Asia, flying to southern Japan and wintering in southern China. There is rare in China and it's the first record in Beijing.

We also actively carry out the publicity to people of the bird banding. We recruited a group of volunteers to the society, learning the knowledge of bird banding technology. The media including the People's Daily, Beijing daily and the Beijing TV station also reported for the work of bird banding, let more people know and understand the work of bird banding and improve the social awareness to the bird banding.

(Yang Shi, Beijing Wildlife Rescue and Rehabilitation Centre)

The recapture of banded birds in 2012 and 2013

A total 468 birds of 42 species were recovered in 2012 and 2013. Among them, 50 birds of 23 species banded in China, were recovered also in China. 65 banded birds in China of 17 species were recovered in other countries. 353 birds of 15 species banded abroad were recovered in China. The most numerous recapture species was Whooper Swans ($n = 158$), of which 156 birds migrating from Mongolia, and the other 2 birds were banded at Manasi Wetland of Xinjiang and Nandagang of Hebei in China. 156 Red Knot individuals were recovered, the second most species, including 154 banded in New Zealand, 1 banded in Australia and another 1 banded in China, recovered in Russia.

From 2012 to 2013, 312 color marked birds of 21 species were re-sighted, which were mainly waders. Among them, 16 birds banded in China of eight species were recovered also in China. 49 banded in China of nine species were recovered in other countries. 247 birds of 16 species banded abroad were recovered in China.

(Lixia Chen, Yunqiu Hou and Jun Lu, National Bird Banding Center of China)

Research Reports

Three new records of birds from Xinjiang

Three new records of birds from China are published respectively by local birdwatchers in July-Sept., 2014 in Xinjiang, including Blue-cheeked Bee-eater (*Merops persicus*) by Li Weidong et al. in Altun Mts. (90°20'E, 37°18'N, 3,900 m asl), European Honey Buzzard (*Pernis apivorus*) by Yang Tingsong near Ili River (81°18'E, 43°52'N, 600 m asl), and the India Pond Heron (*Ardeola grayii*) by Peng Yinxing in Kalakuli Lake (75°05'E, 38°23'N, 3,600 m asl).

(Ming Ma, Weidong Li et al. Xinjiang Institute of Ecology and Geography, CAS)

Conserving China's coastal wetlands is urgently needed

China's coastal wetlands are important habitats for millions of waterbirds, supporting 25% of total waterbird species worldwide. Unfortunately, the area of coastal wetlands is rapidly decreasing because of over-reclamation. The total length of constructed seawall has exceeded 60% of total length of coastline and over half of coastal wetlands disappeared over the past half century. Moreover, large area of coastal wetlands will be enclosed according to the development plans constituted by the local governments. Over-reclamation not only threatens waterbirds and other wildlife depending on coastal wetlands, but also threatens ecological safety of coastal region, which eventually disadvantageously affect the sustainable development in the coastal regions.

Although China's central government has taken measures to conserve the coastal wetlands, there are still many challenges in the practice of wetland conservation: national legislation for wetland conservation is still absent, conflicts and overlapping functions in wetland management among multiple government agencies, over-emphasize economic benefits from reclamation while ignore the long-term benefits from wetland conservation; In addition, environmental impact assessments for coastal wetland reclamation projects focus on the potential loss of fisheries, environmental pollution, and other direct impacts on people but largely ignore the loss of biodiversity or associated ecosystem services.

To effective conserve coastal wetlands, legislation is required to set a mandatory minimum area for coastal wetlands at both national and local levels to achieve a target of "no net loss". An effective agency directly under the State Council is needed to coordinate the functions and responsibilities among the many government agencies involved in wetland management. Strict environmental impact assessments must be performed on reclamation projects, in which cumulative ecological impacts of multiple reclamations for different regions should be considered. Mechanisms must be established for government authorities to be accountable for ecological losses. For the local governments, it is important to change the model of economic development to decrease their heavy dependence on increasing land area but to increase the added value and

the efficiency of existing land. Finally, outreach and education about ecosystem services and sustainable development are needed to raise public awareness and compliance for conserving coastal wetlands. To meet the targets of “ecological civilization” and to support sustainable development, Chinese governments at all levels must place a high priority on the conservation of coastal wetlands and their ecosystem services.

This article was published in Science in Nov. 21st, 2014. Refer to: Ma Z.J. et al. (2014) Rethinking China's new great wall. Science, 346: 912-914.

(Zhijun Ma, School of Life Sciences, Fudan University)

Avian influenza H5N1 viral and bird migration networks in Asia

The spatial spread of the highly pathogenic avian influenza virus H5N1 and its long-term persistence in Asia have resulted in avian influenza panzootics and enormous economic losses in the poultry sector. However, an understanding of the regional long-distance transmission and seasonal patterns of the virus is still lacking. In this study, we present a phylogeographic approach to reconstruct the viral migration network. We show that within each wild fowl migratory flyway, the timing of H5N1 outbreaks and viral migrations are closely associated, but little viral transmission was observed between the flyways. The bird migration network is shown to better reflect the observed viral gene sequence data than other networks and contributes to seasonal H5N1 epidemics in local regions and its large-scale transmission along flyways. These findings have potentially far-reaching consequences, improving our understanding of how bird migration drives the periodic reemergence of H5N1 in Asia.

(Huaiyu Tian, Sen Zhou, Lu Dong, Thomas P. Van Boeckel, Yujun Cui, Yarong Wu, Bernard Cazelles, Shanqian Huang, Ruifu Yang, Bryan T. Grenfell, and Bing Xu. PNAS, 112:172-177)

Extra-pair paternity is unrelated to the spouse's genetic compatibility in social monogamous bird, Varied Tit (*Parus varius*)

About 92% of bird species are social monogamy, but many of the social monogamous birds have EPP (extra-pair paternity). Varied Tits (*Parus varius*) are social monogamous but their genetic mating systems are not ascertained. Our results showed that 15 of 32 broods (46.9%) had extra-pair nestlings and 27 of 191 nestlings (14.1%) are results of extra-pair fertilizations, which indicated Varied Tits are not serious social monogamous but with a high level of EPP. Further explorations about the reason of EPP occurrence on Varied Tits showed that there was no significant difference between the broods which had EPP and without EPP ($P=0.504$). Heterozygosities' comparison between WPO's from the broods with EPP and the broods without EPP also showed no significance ($P=0.118$), which was the same condition between the EPO (Extra-Pair Offspring) and WPO (Within-Pair Offspring) in the broods with EPP ($P=0.206$).

Additionally, physical indicators between WPO and EPO were also no significant differences ($P_s > 0.05$). In summary, the emergence of EPP in Varied Tits was not in favor of the genetic compatibility which needs further exploration on other aspects. See *Acta Ecologica Sinica*, DOI: 10.5846/stxb201312132947 for details.

(Ruiqiang Ma, Lei Zhang, Peng Chang, Donglai Li, Qijiu Li, Jiangxia Yin and Dongmei WAN, Liaoning University)

Global temperature increase promoted the evolution of the Chinese Bulbul

One of the recent published papers titled “Potential effects of climate change on the Chinese Bulbul (*Pycnonotus sinensis*) in China” indicate that the northward expansion of the Chinese bulbul is correlated with temperature increases, habitat changes and human growth, which coincide with the increased presence of urban parks and green spaces. As a result of these changes, the Chinese Bulbul experienced a population increase and range expansion. These results suggest that increasing temperatures, along with human disturbance, may promote the evolution of the Chinese Bulbul.

(Longying Wen)

Changes in phytohaemagglutinin skin-swelling responses during the breeding season in a multi-brooded species, the Eurasian tree sparrow: do males with higher testosterone levels show stronger immune responses?

Life-history theory assumes that the fitness costs of immunity may have negative effects on reproductive success. Similarly, the immunocompetence handicap hypothesis is based on findings that testosterone (T) has immunosuppressive effects, although the basis of this hypothesis has recently been challenged. As much of the work examining the relationship between T levels and immune function has been carried out in captive-housed species, these results may not accurately reflect the situation of animals living in natural environments. To better understand the relationship between plasma T levels and immune function, studies focusing on free-living animals are needed. A previous study by our group determined the changes in both baseline and stress-induced T levels in free-living Eurasian tree sparrows (*Passer montanus*) across different annual-cycle stages. In this study, we further report the phytohaemagglutinin skin-swelling (PHA) immune response in this multi-brooded species during different breeding sub-stages, and then determine the relationships between the PHA response and both baseline and stress-induced T levels. Our results show that the PHA response varied across the different sub-stages and differed significantly between the first and second brood stage. Furthermore, T levels in male sparrows are positively correlated with the PHA response during the breeding season, whereas this relationship is negative in females, suggesting that the biological function of T

differs between the sexes. Therefore, our results suggest that free-living animals have evolved the ability to orchestrate trade-offs between reproduction and immune functions based on changes in physiology and the environment, which should provide further opportunities to study the flexibility and plasticity of physiological and ecological adaptations in natural environments. The paper has been published in Journal of Ornithology (DOI:10.1007/s10336-014-1104-2.).

(Dongming Li and Yuefeng Wu, Hebei Normal University)

Intra-seasonal reproductive strategy of a multi-brooded passerine: the saxaul sparrow (*Passer ammodendri*)

Among reproductive strategies of bird species, the variation in egg investment is an important component well discussed in previous studies. The intrinsic and extrinsic constraints determining the egg size were concerned with age and body condition of the females, quality of the males, clutch size and the environmental factors such as ambient temperature. Intra-clutch changes of egg size with the egg-laying order were generally used to understand the strategies of brood-survival or brood-reduction adopted by females in different situations. Based on the study of saxaul sparrow (*Passer ammodendri*) from 2010 to 2014 in the An'xi Extra-Arid Desert National Nature Reserve in northwest China, we discussed the factors affecting egg size and the breeding tactics taken by this passerine species. Our results indicated that there were significant differences in clutch size, egg volume and fledging rate between two broods of the saxaul sparrow, and this typical desert species poured more breeding resources into favorable second-brood period with high expected reproductive output. No significant relationship between egg size and ambient temperature was found during the first and the second clutch periods separately. Female body condition (during nestling feeding) had no significant relationships with main reproductive parameters, but the male body condition showed a significant correlation with the clutch size. No evidence was found to support the hypothesis of trade-off between clutch size and egg size neither in unstable first-clutch period nor in favorable second-clutch period. The intra-clutch variation of egg size suggested that the saxaul sparrow probably adopted a brood reduction strategy.

(Xinkang Bao, Wei Zhao, Fangqin Liu, Xiaoyu Zou, School of Life Sciences, Lanzhou University)

The change of the bird community over the past two decades in Anxi National Nature Reserve of Gansu

Three comprehensive investigations have been conducted every ten-year since 1988 in Anxi Extreme Arid National Nature Reserve of Gansu Province. The species diversities of birds in this region have some changes over the past two decades. Among the 151 avian species, there were 67 species (44.37%) newly occurred or disappeared in the region. The bird species abundance and

community diversity increased slightly, but the composition of species has changed a lot. Two bird species, *Netta rufina* in wetland habitat and *Streptopelia decaocto* in village and farmland habitat have become dominant during the third investigation, but had no record during 1988 survey. The avifauna belonging to the Oriental Region has increased evidently and some species (*S. decaocto*, *Phoenicurus frontalis*, *Emberiza pusilla*) expanded their distribution moved westward probably due to climate warming. The newly occurred bird species also include those species from the west such as *Sturnus roseus* and from the Tibet plateau such as *Montifringilla nivalis*. The 30 species that disappeared are mainly summer migratory species (43.33%) and transient migrants (46.67%). The number of two Strigiformes species, *Asio otus* and *Bubo bubo*, has decreased remarkably over the past 20 years.

(Xinkang Bao, Wei Zhao, School of Life Sciences, Lanzhou University; Zengwu Yang, Yongwei Yang and Liang Wang, Administration of Gansu Anxi Extreme Arid National Nature Reserve)

The dynamic changes of bird population at Hohhot Baita International Airport during last five years

The bird strike prevention laboratory of Inner Mongolia University has conducted a systematic survey for birds at aircraft movement area at Hohhot Baita International Airport from November 2004 to October 2005, November 2010, and October 2011. The study aimed at understanding the change of the avian species composition, abundance, and the diversity at the airport during the past five years and what caused such changes. The data from the two periods were compared, and we found that 1) the bird abundance and species number from the second period was significantly reduced. The main reasons for the decreases were that the environment surrounding the airport has become simplified after ecological manipulation and scientific and standardized managements to more effectively expel birds. Because of those measures, the airport become less attractive to the birds; 2) the second investigation showed that bird diversity became lower, dominance was higher in spring and autumn, but lower in winter and summer, which indicated that bird community structure became simpler. The data showed that avian species associated with the airfield were birds often associated with human activities, and difficult to expel such as magpies, sparrows and crows. The results suggested that management actions at the airport were effective. It is important to note that one of the main threats to the airplane strike is still the birds associated with human; and 3) for the ecological environment, airport activities had interfered with the normal survival of birds and decreased the bird diversity. Next research subject for the airport staff is how to ensure flight safety and make birds stay away from the airfield.

(Wei Wang, Guisheng Yang and Chenxia Liang, Inner Mongolia University)

Long-tail Minivet at Daqing Mountains , Inner Mongolia

The inventory of birds at the Bay of Jiu Long in Hongzhao countryside, Zhuozi Country, Ulanqab, Inner Mongolia (belongs to a branch of Daqing Mountains of Yinshan Mountains, geographic coordinates 02.881°41'N, 112°02.922'E, at an altitude of 1,526 m asl) detected 60 brightly colored birds foraging in the woodlands on hillsides at the south of valley stream. The bird had the black beak and feet; male with black head, red wing spot and dark red chest below; female with yellow frontal base and wing spot, grey ear coverts and cervical portion. The birds perched at the open forest and shrubs in the south slope of the stream valley. Dwarf Apple (*Malus baccata*), Aspen (*Populus davidiana*), Birch (*Betula platyphylla*), and Drought Elm (*Ulmus glaucescens*) were the main tree species. It was identified as the Long-tail Minivet (*Pericrocotus ethologus*) based on the photographs.

Globally, the species is distributed in Bangladesh, Afghanistan, Indochina, Nepal and northeastern India, Sikkim, Bhutan. In China, it mostly distributed in southwest including Sichuan, Yunnan, Guizhou, Guangxi and South Tibet, stretched north to Shaanxi, Shanxi, Henan and Hebei. It is the new record for Inner Mongolia. Its northward spreading to Inner Mongolia might have relationship with climate warming.

(Chenxia Liang and Guisheng Yang, Inner Mongolia University)

Testing hypotheses of mitochondrial gene-tree paraphyly: unravelling mitochondrial capture of the Streak-breasted Scimitar Babbler (*Pomatorhinus ruficollis*) by the Taiwan Scimitar Babbler (*Pomatorhinus musicus*)

Species-level paraphyly inferred from mitochondrial gene trees is a prevalent phenomenon in taxonomy and systematics, but there are several potential causes that are not easily explained by currently used methods. This study aimed to test the underlying causes behind the observed paraphyly of Streak-breasted Scimitar Babbler (*Pomatorhinus ruficollis*) via statistical analyses of four mitochondrial (mtDNA) and nine nuclear (nuDNA) genes. Mitochondrial gene trees show paraphyly of *P. ruficollis* with respect to the Taiwan Scimitar Babbler (*Pomatorhinus musicus*), but nuclear genealogies support a sister-group relationship. Predictive coalescent simulations imply several hypothetical explanations, the most likely being mitochondrial capture of *P. ruficollis* by *P. musicus* for the observed cyto-nuclear incongruence. Further approximate Bayesian computation suggests a unidirectional introgression model with substantial level of gene flow from *P. ruficollis* to *P. musicus* during their initial divergence during the Late Pleistocene. This specific observation frames several potential causes for incongruent outcomes of mitochondrial and nuclear introgression in general, and on the whole, our results underscore the strength of multiple independent loci for species delimitation and importance of testing hypotheses that explain disparate causes of mitochondrial gene-tree paraphyly.

(Feng Dong, Fasheng Zou, Fumin Lei, Wei Liang, Shou-Hsien Li, Xiaojun Yang)

News and Notes — Abroad

13th China Ornithological Conference will be held during Nov 12-15, 2015

The 13th China Ornithological Conference will be held in Hefei, Anhui during Nov 12-15, 2015. The Conference will be organized by China Ornithological Society (COS), and hosted by Anhui University and Anhui Zoological Society. The conference has called for Symposia and round table topics. The organizer invites those who are interested to submit symposium or round table proposal before April 30, 2015. Individual presentations should be submitted before June 30, 2015.

Publications

Fauna of Inner Mongolia Vol. 4

The fourth volume of *Fauna of Inner Mongolia* will be published in January 2015. The publication is edited by academician Rigan Xu, Profs. Lianlian Xing and Guisheng Yang. *Fauna of Inner Mongolia* contains six volumes. The document is the Volume IV, Passeriformes, which contains general introduction and respective introduction of two parts. The volume documented the species and distribution of Passeriformes in Inner Mongolia. The respective sections contain Passeriformes birds recorded in Inner Mongolia, totaling 227 species, and descriptions of the morphological characteristics and geographical distribution of each family and genus, and morphological characteristics of each species. The document also includes information related to taxonomic problems of subspecies, ecology and residential types, the relationship with human beings, the status and conservation of population and geographical distribution, as well as the species names in Mongolian and English. Bird pictures and geographical distribution maps also are the features of the book.

The book is a systematic scientific works on zoology, which may serve as a valuable reference for animal researchers, college teachers and students, governmental administrative department concerned with wild animals, and the people who work in the fields of farming, forestry, animal husbandry, medicine, airport, electric power, foreign trade or environmental assessment.

(Guisheng Yang and Chenxia Liang, Inner Mongolia University)

Avian Research launched in October 2014

Avian Research (ISSN 2055-6187, eISSN 2053-7166, CN10-1240/Q), an English journal of ornithology jointly sponsored by China Ornithological Society and Beijing Forestry University, has

been launched online in October 2014.

The journal is published by BioMed Central, an open access academic publisher, part of Springer. All publication costs are covered by Beijing Forestry University, so authors do not need to pay an article-processing charge.

The journal publishes research articles and reviews that cover the full branches of ornithology. For more information and submission, please visit www.avianres.com.

(Pengjun Cheng, Editorial Office of *Avian Research*)

Announcement

The second International Ornithological Congress of Southeast Asia

The second International Ornithological Congress of Southeast Asia (IOCSEA 2015) will be held during July 20-23, 2015 at Khon Kaen, Thailand. The IOCSEA2015 is now open for abstract submission and early-bird registration until January 30 and March 30 2015, respectively. For those who are interested to participate, more information can be found at <http://www.sc.kku.ac.th/iocsea2015/index.html#>

(Yang Liu)

The Asia-Pacific Chapter Annual Meeting 2015 of the Association for Tropical Biology and Conservation

The Asia-Pacific Chapter Annual Meeting 2015 of the Association for Tropical Biology and Conservation will be held in Phnom Penh, Cambodia, from Mar 30–April 2, 2015. This meeting is now open for abstract submission and early-bird registration until January 31, 2015. For those who are interested to participate, more information can be found at <http://tropicalbiology.org/ap2015/>.

(Yang Liu)

Front Cover

The Brahminy Kite (*Haliastur indus*) is a medium-sized bird of prey in the family Accipitridae. It is distributed in the Indian subcontinent, Southeast Asia, and Australia, found mainly on the coast and in inland wetlands where it feeds on dead fish and other prey. Adults have a reddish brown plumage and a contrasting white head and breast which makes them easy to distinguish from other birds of prey.

Photographed by Junjie Shen in Tibet, March 2013.

短耳鸮 (*Asio flammeus*)

摄影 戴美杰



凤头䴙鹋 (*Podiceps cristatus*)

摄影 周国胜



蓝胸秧鸡 (*Gallirallus striatus*)

摄影 吴涛



水雉 (*Hydrophasianus chirurgus*)

摄影 严少华

