# Chimps found using spears

*by Bend Weekly News Sources*

Chimps in SenÂ-eÂ-gal are regÂ-uÂ-larÂ-ly makÂ-ing and usÂ-ing spears to hunt othÂ-er, small priÂ-maÂ-tes, withÂ-out huÂ-man help, acÂ-cordÂ-ing to reÂ-search led by an anÂ-throÂ-poÂ-lÂ-oÂ-gist. Itâ€™s the first study to reÂ-port regÂ-uÂ-lar tool use by non-huÂ-mans while huntÂ-ing othÂ-er verÂ-teÂ-brates, acÂ-cordÂ-ing to the U.S. NaÂ-tionÂ-al GeÂ-oÂ-graphÂ-ic SoÂ-ciÂ-eÂ-ty, which helped fund the work.

A bushÂ-baÂ-by (OtoleÂ-mur garÂ-netti) was a reÂ-ported vicÂ-tim of a spear-wielding chimp. (ImÂ-age courÂ-teÂ-sy U.S. Nat'l HuÂ-man GeÂ-nome Inst.)

Anthropologist Jill Pruetz of IoÂ-wa State UniÂ-verÂ-siÂ-ty in Ames, IoÂ-wa, and PaÂ-co BerÂ-toÂ-laÂ-ni, a gradÂ-uÂ-ate stuÂ-dent at the UniÂ-verÂ-siÂ-ty of CamÂ-bridge, U.K., docÂ-uÂ-mented 22 cases of chimps makÂ-ing spears to use in huntÂ-ing down smaller priÂ-maÂ-tes in cavÂ-iÂ-ties of holÂ-low branches or tree trunks.Chimps made the spears of live branÂ-ches that they trimmed, then sharpÂ-ened with their teeth, PruÂ-etz and BerÂ-toÂ-laÂ-ni said. They found the actÂ-iÂ-viÂ-ties at FonÂ-goli, SenÂ-eÂ-gal, in 2005 and 2006. A paÂ-per on the findÂ-ings is to apÂ-pear in the March 6 isÂ-sue of the reÂ-search jourÂ-nal CurÂ-rent BiÂ-olÂ-oÂ-gy. The paÂ-per was onÂ-line in the jourÂ-nal startÂ-ing toÂ-day.â€œWe came upÂ-on the disÂ-covÂ-ery quite unÂ-exÂ-pectÂ-edÂ-ly,â€• said Pruetz. â€œThere were hints that this beÂ-havÂ-ior might ocÂ-cur, but it was one time at a difÂ-ferÂ-ent site. Then I talked to [Bertolani] and he told me that he saw a feÂ-male hunt with tools. When he looked through origÂ-iÂ-nal daÂ-ta... we realÂ-ized he had othÂ-er evÂ-iÂ-dence and obÂ-serÂ-vaÂ-tions of them probÂ-aÂ-bly doÂ-ing the same thing. While in SenÂ-eÂ-gal for the spring seÂ-mesÂ-ter, I saw about 13 difÂ-ferÂ-ent huntÂ-ing bouts. So it realÂ-ly is haÂ-bitÂ-uÂ-al.â€•Chimps repeatedly jabbed tools inÂ-to holÂ-low trunks or branches and smelled and/or licked them upÂ-on exÂ-tracÂ-tion, the reÂ-searchÂ-ers said. Two of the 22 cases were judged as mereÂ-ly playÂ-fulâ€”in the case of an inÂ-fant maleâ€”or exÂ-plorÂ-aÂ-toÂ-ry. In all othÂ-er cases, the sciÂ-entÂ-ists said the chimps poked with such force that prey could have been inÂ-jured. They deÂ-sÂ-cribed just one case in which a chimp exÂ-tracted a bushÂ-baÂ-by, a smalÂ-ler priÂ-mate, usÂ-ing a spear.

AlÂ-though huntÂ-ing is preÂ-domÂ-iÂ-nantly an adult male acÂ-tivÂ-iÂ-ty with chimps, onÂ-ly one adult male of 11 maÂ-les in the chimp comÂ-muÂ-niÂ-ty was seen in the tool-assisted huntÂ-ing, the inÂ-vesÂ-tiÂ-gaÂ-tors said. The rest were adÂ-oÂ-lesÂ-cent or younÂ-ger chimps of both sexes.â€œIn the chimp litÂ-erÂ-aÂ-ture, there is a lot of disÂ-cusÂ-sion about huntÂ-ing by adult maÂ-les, beÂ-cause baÂ-siÂ-calÂ-ly, theyâ€™re the onÂ-ly ones that do it, and they donâ€™t use tools,â€• said Pruetz.â€œFemaÂ-les are rareÂ-ly inÂ-volved. And so this was just kind of asÂ-toundÂ-ing on a numÂ-ber of difÂ-ferÂ-ent levÂ-els. Itâ€™s not onÂ-ly chimps huntÂ-ing with tools, but feÂ-maÂ-lesâ€”and the ones who huntÂ-ed the most with them were adÂ-oÂ-lesÂ-cent feÂ-maÂ-les.â€œItâ€™s clasÂ-sic in priÂ-maÂ-tes that when there is a new inÂ-noÂ-vaÂ-tion, particularly in terms of tool use, the youngÂ-er genÂ-erÂ-aÂ-tions pick it up very quickÂ-ly. The last ones to pick up are adults, mainÂ-ly the maÂ-les,â€• she said. â€œThis is beÂ-cause imÂ-maÂ-tures learn from the ones they are most afÂ-filÂ-iÂ-atÂ-ed with, their mothÂ-ers.â€•The findÂ-ings supÂ-port a theÂ-oÂ-ry that feÂ-maÂ-les might have played a role in the evÂ-oÂ-luÂ-tion of tool techÂ-nolÂ-oÂ-gy among early huÂ-mans, Pruetz said. Those techÂ-noloÂ-gies would have inÂ-cludÂ-ed both huntÂ-ing- and gathering-related acÂ-tivÂ-iÂ-ties. â€œThe comÂ-biÂ-naÂ-tion of huntÂ-ing and tool use at FonÂ-goli, beÂ-havÂ-iors long conÂ-sidÂ-ered

hallÂ-marks of our own speÂ-cies, makes the popÂ-uÂ-laÂ-tion esÂ-peÂ-cialÂ-ly inÂ-triguÂ-ing,â€• wrote the sciÂ-entÂ-ists in the CurÂ-rent BioÂ-loÂ-gy paper. â€œThe obÂ-serÂ-vaÂ-tion that inÂ-diÂ-vidÂ-uÂ-als huntÂ-ing with tools inÂ-clude feÂ-maÂ-les and imÂ-maÂ-ture chimÂ-panzees sugÂ-gests that we should reÂ-think traÂ-diÂ-tionÂ-al exÂ-plaÂ-naÂ-tions for the evÂ-oÂ-luÂ-tion of such beÂ-havÂ-ior in our own lineÂ-age. LearnÂ-ing more about the unique beÂ-havÂ-iors of chimÂ-panzees in such an enÂ-viÂ-ronÂ-ment, beÂ-fore they disapÂ-pear, can proÂ-vide imÂ-porÂ-tant clues about the chalÂ-lenges facÂ-ing our earÂ-liÂ-est anÂ-cesÂ-tors.â€•

Courtesy National Geographic Society and World Science staff

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