6203 Monitoring of Social Structure and Space Use by Amur Tigers (*Panthera tigris* Temminck, 1884) in Russian Far East Based on GPS Telemetry and Phototraps Data

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To better understand spatial structure of Amur tigers at the southern edge of their range we fitted 14 tigers (6♀♀ and 8♂♂) with 15 GPS-Argos collars between 2008 and 2011 in Ussuriskii Reserve and Land of the Leopard National Park, Russia. Also we used 54 camera traps in Ussuriskii reserve. 24447 trap–days were worked out. We recorded 14 tigers in the studied area. Population density (SPACECAP) fluctuate from 0.11 tigers/100 km^2 to 0.58 tigers/100 km^2. Fixed kernel estimates of male home-ranges were larger than those of females (Mean 95%-FK$_♀$=401±205 km^2; Mean 95%-FK$_♂$=778±267 km^2). Home-range size of females was similar to estimates derived from earlier work further north. Low overlap of adjacent home-ranges suggested that females retained exclusive territories. Real core-areas of females overlapped only slightly. Home ranges of males were smaller than those of males to the north, and in contrast to previous studies, high overlap amongst males indicated the absence of territoriality. Nonetheless, real core-areas of males did not overlap, suggesting some spatial separation. In comparison to other tiger populations, the sex ratio in our two study areas was highly skewed towards males. We believe this skewed sex ratio resulted in the dissolution of territoriality of males due to an inability to defend individual females, with males resorting to scramble competition for mates. Continued monitoring of these sites to determine whether shifts in the sex ratio might result in a return to male territoriality would provide confirmation of our tentative hypothesis.