

< NOTE >**A New Record of Invasion by an Unknown Unit Group into the Center of M Group Territory.**

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More than 30 years have passed since the research on chimpanzees in Mahale started. However, after the extinction of the neighboring K group (1), no group had been observed to use the territory of the M group except for the N group, which shared the southern periphery of the M group's territory. We observed a case of invasion by an unknown unit group into the M group's territory for the first time. This was extraordinary because the invaded area was close to the center of the M group's territory and the invaders were totally unknown to observers. Here we briefly report on the developments of the invasion.

In June 1998, the M group went beyond the Nkala Valley and started to use the Mbamba and Kasangaji Valley (Fig. 1). In this area, they were using a large food patch of the ripe fruit of the *Mimusops* sp. Such a large patch of *Mimusops* is not known in any other part of the M group's territory.

Their movement from June 18 to 27 was reconstructed on the map (Fig. 1). At this time, the M group was forming a large party composed of most of the group members.

In the same period, from June 21 to 25 except for the 22nd, calls of an unknown group were heard in the southern half of the M group's territory as well as high up in the eastern mountain. Judging from the number of calls, the size of this group was as large as, or even larger than, the M group. The movement of this group was also plotted on the map. On June 25, we observed the group directly along the right bank of the Sansa Valley. Four unknown adult females were observed. After

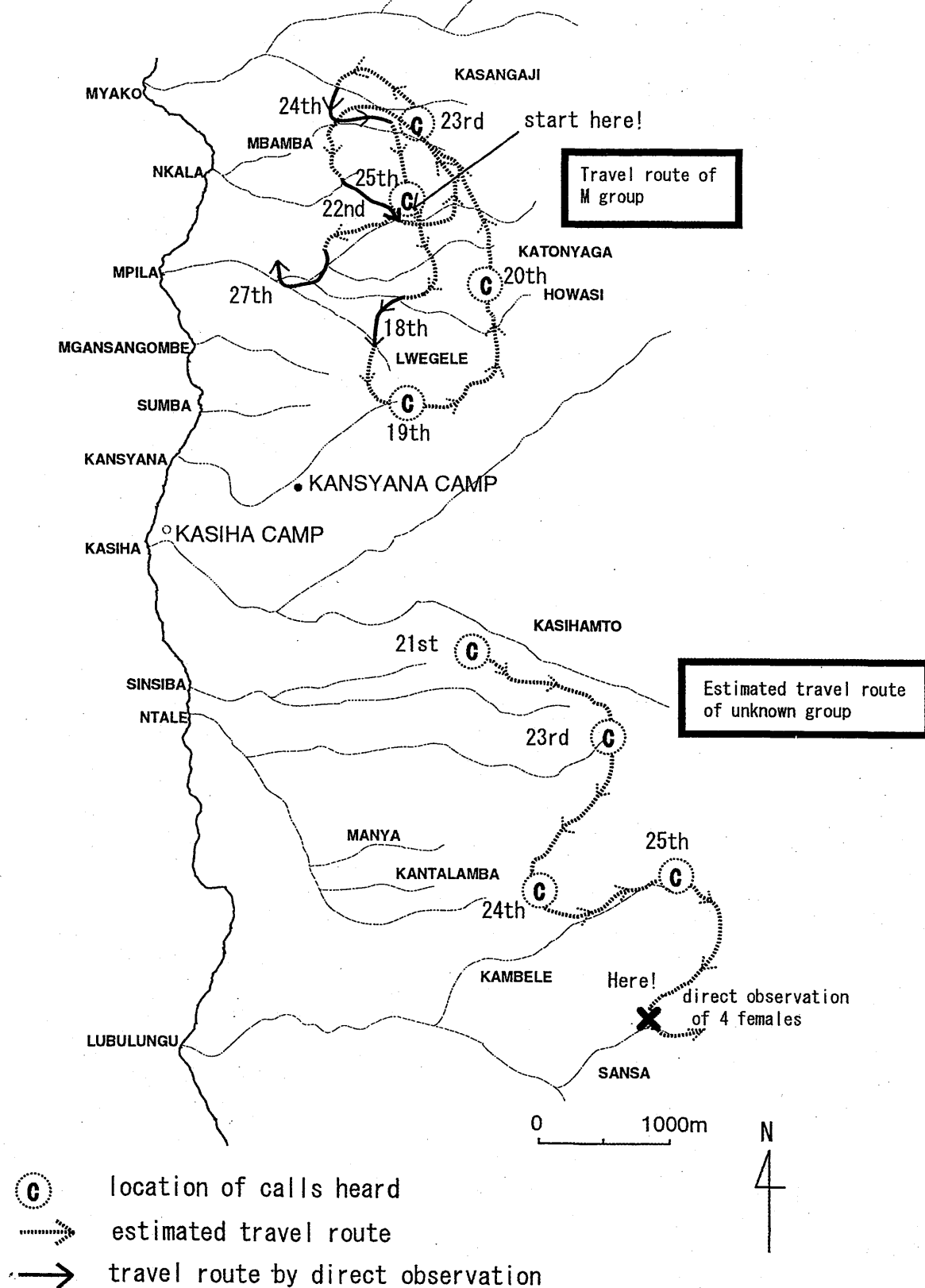
a minute or so, they ran away toward the headwaters of the Sansa Valley, where other voices were heard. Judging from the vocalization, the size of this party was 5 to 10. This was much fewer than we had imagined at first, perhaps because [1] only a part of the whole group made calls, or [2] it was a small party of the larger group. We heard no more calls other than those of the M group after that.

The group we observed was definitely not the M group. It seemed to have invaded the M group's territory. After the K group became extinct, only the N group had overlapped its range with the M group's (2). It is impossible to decide which of the neighboring groups we observed because no systematic research has been conducted on them since 1975 (3).

Why was the M group's territory invaded by one of the neighboring groups? Various related factors could explain this invasion. One is that the M group might have become weaker in inter-group relationships because of its decreased size. After the former alpha male, Ntologi, died, almost half of the unit group members disappeared. Those who disappeared included most of the high-ranking adult males (the reason for their disappearance is unknown). Another reason for the invasion could be that the M group was ranging to the far north part of its territory. For a month the M group was observed around the Kasangaji Valley, where there were many *Mimusops*. Thus, the main part of their territory was vacant as long as three weeks. This probably gave the other group the opportunity to fill the vacancy.

Consumption of the fruit of *Mimusops*, on which the M group gorged themselves, had only been earlier observed for K group in 1977 (4, Uehara, unpublished data). Accordingly, this was the first time for us to observe the M group feed on this fruit. A possible explanation for not having been observed the feeding of this fruit since 1977 is that this species might only bear fruit at long intervals of several years.

Fig. 1 Travel routes of M group and an unknown chimpanzee group in June 1998



References

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