Does decision-making in groups foster rationality and selfishness, or does it give rise to nasty behavior towards outsiders? In this paper, we implement a large-scale lab-in-field experiment in Slovakia and Uganda (N=2,309) and provide new evidence showing that the behavioral difference in inter-personal interactions between groups and individuals is primarily driven by a stronger preference to be nasty even at one’s own expense. Furthermore, the greater nastiness of groups arises almost exclusively due to the psychological effect of being a part of a group on individual preferences, rather than due to deliberation and joint decision-making among group members. We observe strikingly similar patterns on both continents, suggesting the elevation of the dark side of human social motivations is a deeply rooted behavioral response when individuals are banded in a group. The findings have implications for economic theory and can help to explain the prevalence of self-destructive group conflicts.