**iLEAPS- OzFlux Joint Conference 2023**

Theme 6.1: Socio-ecological aspects of land use change (**Conveners**: Gemma Purser)

<https://www.ileaps-ozflux2021.org/abstracts>

**Instruction**

*The abstract consisting of one paragraph of not more than 200 words. It should state the hypothesis, intent or purpose of the work, the theoretical or experimental plan used, key findings and major conclusions. It should not include experimental details, data, figures, tables or references.*

Title: The hidden socio-ecological impacts of modern warfare- evidence from the US Military combat operations in Iraq

War and military intervention are damaging to the wider environment and the communities that rely on these environments. Concrete blast walls have become a major weapon in modern battlefield for protection against explosions and to restrict the movement of insurgents. However, the environmental and social impacts of their production and use remain under the research and policy radar as there are no frameworks for monitoring and reporting such scope III military emissions. We examined the extent of concrete wall used in Baghdad, the embodied carbon and socio-economic impacts on the populace using life cycle analysis techniques and content analysis of existing literature on the socio-economic effects. The concrete slaps littered in Baghdad altered the urban fabric, restricted movement of people and vehicles and increased economic hardships. The embodied carbon of these walls amounts to about 199 thousand tonnes C02e which is comparable with the carbon emissions from 43,282 average sized passenger vehicles on the road for one year. We recommend that robust framework for reporting military emissions be spelt out by the United Framework Convention on Climate Change and emissions included in national inventories.