This paper focuses on one central question: What is a political ecology of security? This paper uses the example of the growing integration between biodiversity conservation and the logic of global security to sketch out a fresh way of examining inter-relationships between environment and security. Existing frameworks provided by security studies and by approaches rooted in more traditional thinking on environmental security do not adequately explain the ways that concerns about poaching and trafficking of some of the world’s iconic species are now being linked in with attempts to tackle organised crime and terrorist financing. For example, there are high profile but poorly evidenced claims that ivory funds the operations of Boko Haram, Al Shabaab and Lords Resistance Army. Such claims have material outcomes on the ground, and are producing a more forceful and militarised approach to wildlife conservation. Wildlife conservationists (in state agencies, NGOs and the private sector) seem to be turning to the techniques, approaches and technologies more usually associated with warfare and counter insurgency operations (including the development of informant networks, use of surveillance technology, weapons transfers and military style training). However the flow is not all one way: militaries, including the armed forces of the UK are also trialling new techniques in conservation initiatives and using anti poaching operations to learn new skills, such as tracking. In this paper I contend that we need to develop the idea of a political ecology of security in order to understand these emerging dynamics more fully.