Recall that the Ramsey number $R(n, m)$ is the least $k$ such that, whenever the edges of the complete graph on $k$ vertices are coloured red and blue, then there is either a complete red subgraph on $n$ vertices or a complete blue subgraph on $m$ vertices – for example, $R(4, 3) = 9$. This generalises to ordinals: given ordinals $\alpha$ and $\beta$, let $R(\alpha, \beta)$ be the least ordinal $\gamma$ such that, whenever the edges of the complete graph with vertex set $\gamma$ are coloured red and blue, then there is either a complete red subgraph with vertex set of order type $\alpha$ or a complete blue subgraph with vertex set of order type $\beta$ – for example, $R(\omega + 1, 3) = \omega \cdot 2 + 1$. We will prove the result of Erdős and Milner that $R(\alpha, k)$ is countable whenever $\alpha$ is countable and $k$ is finite, and look at a topological version of this result. This is joint work with Andrés Caicedo.