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There are many factors that place ecosystems at risk, both natural and human-induced. It is the natural processes themselves in Cúc Phương National Park and on the ~~east~~ coastal sand dunes that cause the beginning of the extent of damage. However, the human-induced changes by humans have the most detrimental effect.

The Cúc Phương National Park faces natural burdens. The traditional population use the forest for subsistence, and this places stress on the ecosystems. In the same way, it is the natural dune processes that place coastal sand dunes at risk from their own natural ways. Large swells, often caused by storms, rage up the beach and degrade the beach significantly, removing very large amounts of sand. In both instances, it is the natural processes and <sup>traditional</sup> ~~traditional~~ ecosystem that places the ecosystem at risk.

To decrease the burden upon the National Park, the traditional villagers have been relocated. They now live within a 'buffer zone' that surrounds the park. This step was

taken on the fear of the extent of damage they were causing to the ecosystem was acknowledged. They used the ecosystem for ~~the~~ food, and relied upon the ecosystem.

However, the article in Source D highlights that there were 'key concerns about its preservation.'

The Coastal Sand Dunes are largely at risk due to those that call them home also. Those who own homes built atop the dunes have destroyed the natural dune ecosystem by preventing natural dune processes to take place. They have also built structures to protect their homes, many of which are walls. In the Terrigal/Wamberal Dune ecosystem, a seawall on Terrigal beach has completely depleted the beach and regular sand nourishment is required to allow a beach to remain there at all. It is clear that those who inhabit an ecosystem are at great risk of destroying it.

The exploitation of ~~the~~ resources within an ecosystem also put it at high risk. The exploitation of resources at Cúc Phương National Park has caused concern as worry is raised over the sustainability

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of such an ecosystem when resources are depleted. The National Park 'provides supplementary food and firewood for cooking,' and the use of this is putting the Park at risk. It is stated that this goes against the conservation values that the Vietnamese government is trying to enforce. The exploitation of resources in the area is concerning for conservation, and greatly diminishes hope for preservation of the National Park.

The exploitation of resources <sup>(within)</sup> ~~(upon)~~ the coastal sand dune ecosystem is also putting the ecosystem at high risk. Sand ~~(grains)~~ that has been depleted by the removal of some elements is unsatisfactory as beach sand. However, sand mining operations are taking place all over the world. Economic gain is made from this practice, as products, such as glass, are manufactured. However, the depleted sand is easily blown away, mainly inland, where it is no longer of use within the dune ecosystem. The ~~(degree)~~ loss of sand prevents the growth and stabilisation of the sand dunes. Depleted soils are

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also unfit for plant growth, and thus dunes comprised of depleted sands are extremely unstable. The exploitation of resources within ecosystems has a significantly negative impact on them, placing them at great risk.

Tourism that takes place within ecosystems ~~(can)~~<sup>has</sup> the potential to place them at great risk. In ~~(the)~~ Cúc Phương National Park, tourism has been associated with the extreme degradation of the ecosystem. The article extract in Source D also highlights how tourism "offers little hope for a more sustainable future" within the Park. The rubbish that tourists dispose of within the park is a hazard to animals that may inhabit the area. The preservation of a largely natural ecosystem is halted due to the negligence of those who leave rubbish within the park. Source E~~(a)~~<sup>(an)</sup> pictures some of the rubbish found. Bottle caps and plastics do not break down naturally and can kill native animals if ingested. The foot traffic associated with tourism also degrades the soils within the park. Source C shows the extent of damage to the

soils. Soil compaction leads to a soil displaying the inability to absorb water, and thus erosion rates are significantly increased. Erosion of soils can degrade plant life and lead to very poor soils that won't support plant life. Tourism within Cúc Phương National Park has put the ecosystem into an area of extreme risk of loss.

Tourism and human activities in the coastal sand dune ecosystems has placed it at significant risk. Activities such as four-wheel-driving and Bmx bike riding along the dunes contours them and leads to significant levels of erosion. When the dune profile is contoured sand cannot accumulate in the correct manner and dune blowouts are likely to occur. Dog walking and 'sand-boarding' also lead to significant degradation of the dunes. These activities often degrade the networks of plant life that stabilise the dune. This causes the sand to become loose and unstable. Again, this is likely to lead to dune blowouts. It is clear that recreational activities (including tourism) in fragile ecosystems puts them at great

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risk.

There are a large amount of factors that put ecosystems at risk. It is the natural stresses, coupled with the man-made burdens upon the ecosystems that cause such significant levels of degradation within each ecosystem, and place them at great risk.

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