

WORLD PLACER JOURNAL

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World Placer Journal - 2004 - Volume 4. Illegal placer gold miners in Mongolia - impacts on ecological systems

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ABSTRACT

"Remarkably, the study indicates that 80,000 illegal placer gold miners have less impact than 135 placer mining companies."



DEMOLISHING A SPOIL DUMP...

Ninjas washing a conical mound of overburden left by a dragline, the material containing significant placer gold. Hailaast Gold Mine in the Zaamar Goldfield.



FREE CLEANING OF A WASH-PLANT...

Ninjas swarming over the wash plant of a placer mining company, the day after the end of the mining season. The ninjas are removing all the spilt sand with its high gold content.

This study highlights the main environmental impacts of the rapid growth of illegal artisanal and small-scale placer gold mining in Mongolia, now exceeding 80,000 people.

ASM negative impact: our study shows that - even though not using mercury - the placer ninjas are causing severe, diverse and new environmental impacts to many hundreds of kilometres of river valleys, including most of the rivers in the Selenge watershed. In particular: a) panning directly in streams and rivers releasing major plumes of suspended clay and traction carpets of silt and fine sand; b) digging and abandoning thousands of unfenced shafts a year; c) destabilising many hectares of land due to crown holes (upward migrating cavities); d) destroying the best grasslands; e) melting permafrost (frozen ground) by burning timber, dung and old car tyres; f) blasting permafrost with explosives liberating nitrates; g) causing air and water pollution from burning tyres; h) multi-tracking on dirt roads; i) disturbing large game; j) poaching game and livestock; k) failing to undertake any rehabilitation; l) peppering reclaimed areas with numerous new shafts, making rehabilitation less effective; m) mining placers in Protected Areas; and n) mining in virgin areas far from existing or planned mines.

ASM less impact than placer companies:

a) less destruction of topsoil, vegetation, archeological remains and landscape because ASM extract placer without recourse to significant stripping of thick overburden;
b) smaller 'mine footprint' as ASM require a smaller



NOT PANNING BUT MATADORING...

Although popularly called panners, the ninjas use mats and bowls not pans. This ninja girl is busy matadoring with a rubber mat to winnow away the sand, silt and clay and leave behind the dense black sand and gold.



1000's OF SHAFTS ALL DUG BY HAND...

Here civil engineering students have turned into ninjas to raise cash for their education - this is the only examples of safety helmet being seen worn by a shaft sinker!



HERDERS TRY GOLD MINING...

Waves of destitute herders switch to ninja-ing to escape poverty. Horse transport is common, as well as Russian jeeps and motorbikes.

land-take because they do not create significant overburden mounds; and
c) thousands of placer ninjas recover gold left behind by less efficient - but legal - placer companies.

Substantial environmental damage is being caused to watersheds, particularly the Selenge watershed. However this is offset by possible large environmental gains to the vast and important steppe ecosystems. Controversially, the study suggests that the people's gold rush is having a net positive impact on the overall environment, by: a) ensuring the permanent removal each year of tens of thousands of nomads from the vast Mongolian steppes, thereby reducing overgrazing and human disturbance to the benefit of the steppe ecosystem and its globally important biodiversity, and allowing the herders who remain to have more sustainable lifestyles; b) minimising the drift of rural people to the cities that lack infrastructure to absorb them without negative socio-economic and environmental impacts. The main destination would be Ulaanbaatar - a major source of river and water pollution in Mongolia.

Both Government and Parliament agree that the situation is complex and not amenable to a knee-jerk response on grounds of either environmental protection or law enforcement, and recognise that the rights of legitimate mining companies must be safeguarded while not jeopardising thousands of rural livelihoods.

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