



# NSW & ACT Prospectors and Fossickers Association Inc.

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**"Fights for fairer access to land in NSW and represents the interests of prospectors and fossickers"**

25 September 2013

To: The Committee Secretariat  
Legislative Council – Committees  
Parliament House  
Macquarie Street  
Sydney NSW 2000

Dear Sir/Madam,

Thank you for the transcript and supplementary questions from my attendance at the General Purpose Standing Committee No. 3 August 26 hearing in relation to its Inquiry into tourism in local communities.

As there is only one small change that I would recommend on the transcript in term of my content, I am including it in this cover letter.

On Page 56, where my statement begins "Essentially on private land"...the phrase "that a fossicker must get permission" should correctly read "then a fossicker must get permission."

Supplementary questions.

## **1. Can you explain the type of fossicking that is most popular?**

**ANSWER:** In order of popularity by the numbers of people involved, 'panning' is the most popular method of fossicking for gold, followed by 'metal detecting' and 'sluicing' in that order.

However, if one was fossicking for gems, then the most likely method would be 'sieving', followed by sluicing or a combination of them both.

All of these methods have their own particular advantages and disadvantages, so it comes down to a personal choice of the fossicker. That choice takes into account the amount of money that can be invested in equipment – a pan with sieve/shovel and pick could be put together for \$100; whereas metal detectors can cost between \$750 and \$7,000; the quality of the ground being fossicked and the time available.

All of these methods are accepted and allowable within the *NSW Fossicking Guidelines* (see Separate PDF document which is attached) published by the NSW Department of Industry and Investment.

In brief, I would explain the methods as follows:

**Panning:** this involves the processing of wash material, which may have been recovered from a crevice in a river or from elsewhere, in a metal or plastic dish or pan. Agitation of the wash in the water-filled pan water settles the gold at the bottom of the pan because gold is heavier than the other gravel and sand material. The gravel and sand is then washed off progressively to leave the gold. The success of panning depends on the skill of the person and quality of the wash dirt that is processed. Panning requires water. Panning was used in the gold rush days, and even today, to 'test' areas for gold and to trace the source of gold in rivers and creeks by a process that is known as loaming. Panning in one form or another has been around for probably thousands of years. It is also used to recover tin. Panning is a wonderful family activity and has introduced many thousands of people to gold and prospecting.

**Metal detecting:** this technology has been around since the mid 1970s with improvements in the depth and sensitivity of machines since then. It involves the use of an electronic sensing device – that looks like a plate (called a 'coil') on the end of a stick – to detect any metal anomaly in the ground. This is a very popular method of modern prospecting and it can be undertaken anywhere. It does not use water. To recover a target the operator must scrape or dig a small hole, which is refilled after the target is recovered. Most targets are not gold – they are lead (bullets and shot-gun pellets); rusted tin; bullet casings and metal fragments; all of it mostly the junk of past generations.

However, the primary purpose of metal detecting in fossicking is to locate gold nuggets ranging upwards from 0.01 of a gram. Detectors can also be used on beaches to search for lost coins or jewellery.

The largest known nugget recovered with a metal detector is the Hand of Faith (876 ounces/ 27kg) found at Kingower, Victoria, in 1980. Douglas Stone's book - *Metal Detecting for Gold and Relics in Australia* – which was provided to the Committee on 26th August 2013, contains extensive descriptions about the use of metal detectors. Minelab Australia is the manufacturer of high end metal detectors and in this sense Australia has been a leader in this field for decades.

**Sluicing:** this method uses a metal, plastic or wood channel approximately 120cm long by 25 cm wide by 10 cms deep, with 'riffles' in the bottom. As gold bearing gravel and sand is washed from the top of the sluice box, the gold settles in front of the riffles as the tailings go out the end. Unlike detecting or panning, it is not a mobile activity – a sluice is usually put into place in a good spot that has first been assessed by panning. River sluices can be placed directly in waterways and fed with wash via buckets or shovels. There are other sluices called 'high-bankers' or 'banjos' which, with the use of water pumped from streams, can process wash-dirt away from the watercourse, or in the sand of the river bed itself. Use of high-bankers ensures that there is no sediment released into creeks. However even sluices that are used directly in waterways do not cause significant turbidity, which could lead to a breach of the *Protection of the Environment Operations Act 1997*.

Sluicing was commonly practiced in the 1800's; where the devices were known by various names such as 'sluices', 'cradles' or 'long toms'. Concentrated sands and hopefully gold are periodically recovered from the bottom of sluices and that material is then panned to recover the gold. In the case of panning and sluicing, wash material is usually sieved – with the use of hand sieves or a 'grizzly' at the top of a sluice prior to the material being processed by the

water. There are desert versions of sluices called 'dry-blowers' which work on the same principle but which use air instead of water.

The negative impact of modern sluicing on water quality is greatly exaggerated by environmentalists. In the gold rush days it was different – there may have been thousands of small miners using a very limited water supply to process thousands of tonnes of dirt. Clearly sluicing under those conditions had a very negative effect on water quality. Under the *NSW Fossicking Guidelines*, this is not permitted today.

Gems – as mentioned, gems e.g. sapphires, emeralds, zircons, topaz, diamonds, which are usually heavier than other material, can also be recovered via sieving and sluicing. They can also be recovered by a keen eye. Fossicking for opal is usually 'specking' by eye from mullock heaps left by shaft mining on opal claims.

## **2. Is your request for fossicking of all types to be made available in National Parks?**

**ANSWER:** Yes. This is in accordance with the *NSW Fossicking Guidelines* which do not differentiate between the methods that can be practiced in different locations. The choice of method is left up to the fossicker.

Fossicking, because of the limits imposed by the guidelines, causes only minimal and temporary impact on the environment. Fossicking is NOT light industrial scale mining as in the old days; nor does it involve the use of digging machinery. The dig holes made by metal detectorists are very small and they are refilled by the detectorists. Such disturbance is virtually unnoticeable after 12 months of normal weathering.

Disturbance by fossicking is also much less than many natural disturbances – such as bushfires; storms that blow trees over and leave gaping holes; wombat burrows -- and feral pests like pigs and rabbits which cause significant damage to the environment, including in National Parks.

Severe floods that occur from time-to-time also cause major change in river-beds and are a continuing variable that result in far more extensive change than that created by modern-day prospectors/fossickers using their hand tools. These floods also obliterate the minor workings left by modern gold-seekers.

Recently I was speaking with the respected, now retired zoologist from the Australian National University, Dr M. Tanton, who stated in unequivocal terms that variety of landscape in the bush actually assists biodiversity.

In this context, a forest where there are both old trees and successional stages of young trees has a healthier biodiversity than a forest where all the trees are the same age. Fossicking activity can therefore actually assist biodiversity because it can provide an opportunity for pioneer and dormant plant species to establish and provide more habitats within the overall matrix.

Dr Tanton's experience with producing Fauna Impact Statements and the Fauna chapter for seven Environmental Impact Statements prepared for State Forest of New South Wales led him to the realisation that the problem of habitat risk was not in the habitats managed by State Forests or locked in National Parks, but lay in the continued uncontrolled loss of forested land and habitats on private land. Dr Tanton contends this loss will inevitably lead to irreversible reduction in numbers of many larger species such as the Powerful and Sooty Owls. A single pair of each of these species requires a forest area of about 10 square kilometres to support it.

This progressive thinking about fossicking is at odds with doomsday protectionists who insist that 'nothing can change' and that 'environmental values' will be trashed by allowing someone to scratch the ground fossicking. In NSW this has gone to extremes and has given environmentalism a bad name for being unreasonable and unbalanced.

In relation to National Parks, it really comes down to what National Parks and where in those National Parks fossicking should be allowed. As indicated in our evidence on 26 August, NAPFA contends that apart from areas of exceptional heritage, flora or fauna value, fossicking should be permitted in all National Parks. Public information and clear maps will assist fossickers to keep to the permitted areas.

The practical reality is that fossickers will tend to go to those areas with a known gold or gem history. However, the ability for the more adventurous to seek out new areas should not be discouraged. For example, in the 'Corner Country' of NSW, National Parks border properties where fossickers have frequented. It is therefore likely that areas in such National Parks (e.g. Sturt National Park) offer good fossicking potential and should be available.

Opening of National Parks to fossickers will not result in thousands of people suddenly descending onto areas and destroying the environmental and heritage values of those areas for evermore. With additional areas open to fossicking (State Conservation Areas and National Parks), the relative impact on all areas will be lessened as there will be a larger area to absorb the number of fossickers into the foreseeable future.

### **3. What sort of fossicking is unavailable?**

**ANSWER:** All types of fossicking as recognized in the *NSW Fossicking Guidelines* are allowed, so technically none are 'unavailable'.

However, the main point about fossicking availability is ACCESS. There are many areas where fossicking is unable to be practiced because of exclusions that have been imposed, or because the land is privately owned or leased and permission is dependent on the owner.

So far as NAPFA is aware, such limits on National Parks and State Conservation Areas were imposed without consultation with the fossicking community of NSW or any consideration of the prospecting heritage, ongoing prospecting use and future prospecting potential of these areas. Access was simply taken away at the stroke of a pen.

There is also an inbuilt legislative protectionist bias that will make this situation worse over time as more and more State Forests become State Conservation Areas; which then in time can be elevated, almost automatically by administrative processes, to be National Parks. This process, which at the time may have been seen as a smart move by protectionists, unfairly and wilfully ignored the needs of the fossicking community – many of whose forebears as miners in the late 1800's helped to build the great state of New South Wales. As could be expected, the needs of the 'big end' of town – mining companies with lawyers and geologists -- were catered for -- but not the needs of the 'little guys'.

NSW needs to proudly celebrate its ongoing small-time mining and prospecting heritage – which today is exemplified by recreational fossickers. In their day, old timer prospectors were the original small business people. They were incredibly hard working, independent, resourceful and brave risk takers. They should be honoured.

**4. At the public hearing on Monday, 26 August you tendered a document with estimated figures on how long fossickers stay in a particular area and how much money they spend. In order to be able to use this information in a report it would be helpful if you could specify the number and dollar values for each figure. Could you update the document to include these details?**

**ANSWER:** I have put some more detail into the attached spreadsheet to describe the various items. To further help clarify the methodology and numbers, the following explanation may also assist.

The data cited has come from documents sourced to the Amalgamated Prospectors and Leaseholders Association of Western Australia (APLA). APLA is the WA equivalent of the NSW & ACT Prospectors and Fossickers Association (NAPFA). APLA was formed in 1904 and has a current membership of over 1200 hundred but also provides an active voice for some 15,000 people who would regard themselves as either full-time or committed part-time prospectors within WA. This includes interstate visitors.

In a study updated in 2012, APLA found that WA Miner's Right holders (covering all recreational prospectors) accounted for \$52 million direct expenditure per annum. (NB: this did not include major expenses of vehicles and caravans, or tourism activity dollars). Considering approximately 75,850 oz of gold, worth around \$98.6 million is extracted by this group, and adding the \$52 million of known expenditure, the \$150 million is calculated.

The direct expenditure of the Leaseholder category, (again not including machinery, machinery repairs, vehicles, caravans, Wardens Court costs, legal and accounting costs, airfares, hire, and many others), is some \$35 million. There is also some 74,341 oz of gold worth around \$96.6 million recovered by this group, bringing this group's contribution to overall activity to \$131.6 million.

When the values of both groups are combined, there is \$87 million of known expenditure and at least 150,000 oz of gold worth \$195 million extracted. This brings the total worth of the sector to the WA economy to some \$281.6 million p.a. These are considered very conservative numbers and the real figures would certainly be higher. APLA's 'rule-of-thumb' estimate of a '\$350 million dollar industry contribution to WA's economy' is well-based and includes an educated adjustment of some \$70 million for under-enumeration. (N.B. These figures do not allow for a multiplier effect for flow-on benefits and unknown expenditure. In WA this is considered to be up to three times, which has been confirmed by WA government agencies and senior politicians.)

When these known values, are extended to other states, based on detector sales, and numbers of prospectors and other commodity sales such as opal, tantalite, and gems and minerals, then prospecting – which is largely recreational -- could easily be a billion dollar industry nationwide. NSW's share of that is not known, but would be very significant given our population and share of retail turnover.

#### **Recreational Prospectors' days in the WA fields**

Based on extensive informal sampling by APLA, and by phone contact with key businesses in gold areas, it is estimated that recreational Interstate visitors spend on average 60 days in WA prospecting, and \$30per day (pd) food, \$15pd consumables.

Fuel is calculated by 6000km round trip, 2000km average in WA, at \$1.50 per litre. The average with 4WD with trailer and vans is 400km on road and 100km on tracks per 80 litres. WA recreational prospectors travel less as they are closer, and full timers further (and this is probably the most underestimated as many members do in excess of 30,000km).

Accommodation – 33% stay in parks for average of two months (mostly first time visitors) at \$20 pd. This has been allowed for a couple.

Full timers mostly camp, but also use various accommodation when checking new areas or if they cannot access lease due to weather, and in transit. This includes Perth and regional city accommodation when visiting O/N for supplies, process of samples etc. It does not include leaseholders who visit town, and it's assumed that all stay on their own lease.

Detector costs are calculated at average of \$3300 per detector as many upgrade to a better 2<sup>nd</sup> hand one, although new is \$6800. This is based on a new one every 5 years, and calculated back to cost per day of prospecting. Leaseholders upgrade every 2<sup>nd</sup> year for licences and every year for lease holders.

The Department of Minerals and Petroleum (DMP) lease costs are based on number at the time, and the annual minimum expenditure is used for leases based upon average size, and includes work, food consumables. It is certainly underestimated as most spend much more than the minimum.

The gold won calculated on ounces each is supported by all categories in the spreadsheet as being accurate, as is expenditure totals for each. The value of the gold in the spreadsheet is based on a gold price of AUD\$1300 oz (at present the actual gold price is AUD\$1400 oz).

The methodology for these numbers is not 'official' but it is quite sound and fit for the purpose of understanding the potential value of the sector to economic activity. NAPFA has a good level of confidence in the overall calculations.

I have done my best to answer all of your questions. If you require any further clarification, please contact me.

I take this opportunity to thank the Committee for inviting NAPFA to appear on behalf of NSW & ACT prospectors and fossickers and look forward to a positive outcome from the inquiry.

Yours sincerely

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