

TRANSCRIPT: Interview with the ABC's The World Today

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Professor Ian Chubb speaks with Elizabeth Jackson about citizen science and the estimated 130,000 Australians who are making contributions to their communities through science.

ELIZABETH JACKSON: Professor Ian Chubb is Australia's Chief Scientist. I put it to him that 130,000 plus volunteers was an impressive figure.

IAN CHUBB: Oh, it is and it's a very pleasing figure I think. I have no doubt it could be more if we alerted people to the possibilities that arise from an engagement in exercising their curiosity and finding a way to share that with others; I think that would be a really great outcome of this whole process.

ELIZABETH JACKSON: Well, who are these volunteers?

IAN CHUBB: Well, there are all sorts of people. I think some of them are very young and just wonder why and there are people a bit older who also wonder why and older people who may be retired and also wonder why. So it's feeding that basic curiosity that is a characteristic of us humans. Wondering about how the world works, how it operates, how the systems of the world work and what impact we're having on some of those systems through our activities. It covers a wide range of people. Just people who are intrinsically curious and want to know why.

ELIZABETH JACKSON: So not necessarily scientists or retired scientists?

IAN CHUBB: Well, I think most of them are not. It might be a farmer living in some part of Australia who is making observations on rainfall; when it rains and how it rains and how much it rains and which way the winds blow, and feeding them into a much bigger database. This gives us a substantially more comprehensive map of what's happening to Australian conditions - much more than any individual scientist or indeed any individual agency working on its own could accumulate. So it's a big contribution to Australia as a whole, to be able to contribute to policy, to shift the way we think about things because there are people out there with an interest.

ELIZABETH JACKSON: Now they're not trained scientists, as you said, so how do you guarantee the efficacy of their observations and recordings?

IAN CHUBB: I think that most of them are told about the principles of scientific inquiry and how to make their contributions more valuable, and they've got to fit into a pattern of course. If somebody decided one day to say it was raining when it wasn't, then that would show up because there are people all around them making the same measurements. I think that the scientists who engage with them are really quite confident that the measurements that have been taken and the activities that are being done are all consistent with the process of scientific enquiry, the methods that we use.

ELIZABETH JACKSON: Has there been any resistance at all from scientists themselves?

IAN CHUBB: Well, not that I'm aware of. I mean, I would never say that all scientists have one voice on any matter at all, so there may well be pockets of that. But if you're a scientist, an ornithologist or whatever and you're worried about the habitat of certain species in the country and you've got 10,000 people helping you find it, how could you complain about that?

ELIZABETH JACKSON: Are most people using a smart phone to do this?

IAN CHUBB: Well, lots more are of course. The technology makes it a lot easier. If you're out somewhere in a remote part of Australia and you see something you didn't expect to see and you can take a photograph of it and send it into the relevant website or whatever they've set up to receive such information, then it's a lot easier, and indeed more accurate, because you can program your phone to give pretty precise coordinates. So you've got a pretty accurate map of where this particular thing has been seen and the scientists can say, well we haven't seen it there before and put another dot on the map, or we haven't put another dot on the map. Or identify it indeed, because there are doubtless a lot of people who would see things they've never seen before or if they have, wouldn't know what they are.

This is a process of gathering together all that information and building up a much more comprehensive picture. So smartphones and technologies like that have certainly made it better and perhaps also bigger in scale.

ELIZABETH JACKSON: That's Australia's Chief Scientist, Professor Ian Chubb.