

# people in science

WHO THEY ARE ● WHAT THEY DO ● ACTIVITIES



## CATHERINE MONEY

PRIMARY EDUCATION

SCIENCE SERIES

A Primary Education Book  
Dove Communications  
60-64 Railway Rd, Blackburn, Victoria, Australia

© 1986 Heather Spurling, David Symington

All rights reserved. Except as provided for by  
Australian copyright law, no part of this book may  
be reproduced without permission in writing from  
the publishers.

Design and Illustrated by Terry Denton  
Cover design by Terry Denton  
Text set by Bookset, North Melbourne  
in 16/17pt Century Old Style  
Printed in Australia by Impact Printing

National Library of Australia  
Cataloguing-in-Publication data:

People in Science.

ISBN 0 85924 436 9.

1. Scientists – Australia – Study and teaching  
(Elementary). 2. Science – Study and teaching  
(Elementary). I. Symington, D. J. (David John). II.  
Victoria College. Toorak Campus. Human Sciences Dept.

372.3'5044



# Catherine Money



Have you ever sunk into the luxurious comfort of a fine, leather lounge suite? Maybe you have one in your home or perhaps you have looked at one in a shop. The smooth look of a leather lounge suite does not happen easily. Scientists, like Catherine Money, have done a lot of work behind the scenes to make sure that the leather products we use are just right.

You most likely know that leather is made by treating the skins of animals like cattle, sheep or kangaroos. But you probably don't know much about how the leather is made. That's something that Catherine Money knows a lot about.



Leather starts as the animal's skin and one of Catherine Money's jobs is to investigate how the farmer can look after the animals in such a way that the skins are not damaged when they arrive to be used to make leather. You will have seen pictures of cattle being branded so that they don't get lost. It was found that the position of the brand could easily change the value of the skin, or hide as the skins of the large animals are called. You wouldn't want a lounge suite with a brand burnt into the back of it, would you? Catherine Money talks to farming groups about the best position for branding and about other ways cattle can be marked for identification. She also encourages farmers to look at the fences on their properties so that the animals don't scratch their skin. A hide with a lot of scratches cannot be used for high quality leather products.





When you look at cattle you will notice that there are folds in the skin around the neck. These neck marks are not wanted in leather products so some of Catherine Money's research work in the laboratory is concerned with finding ways to make these marks less obvious so that more of the hide may be used. This is important to us because if, for example, more pairs of shoes can be cut from the one hide then the shoes will be cheaper.

The process of changing the skin into leather is called tanning. The hair is usually removed from hides before tanning but often the wool is left on sheepskins. In Australia where it can be very hot it would be best if the skins were tanned as soon as they were taken off the dead animals. Of course this isn't always possible. Some skins are sent overseas to be tanned. Any skins which are not tanned straight away need to be preserved. Catherine Money spends part of the time doing experiments to find better and cheaper ways of preserving the skins so that when they arrive to be tanned they are in good condition. If the quality of the hides is improved through better preserving methods then the profit to Australia will be greater.



One problem for the tanning industry is that the traditional processes pollute the water they use. Catherine Money is interested in changing the way tanning is done so as to reduce the amount of pollution.

As you can see by all the different things in which Catherine Money is involved, her working life is full of variety. Sometimes she is in the country or on radio or TV talking to farmers; sometimes she is talking to tanners or meatworkers; and at other times she is working



in her laboratory, or reading about what other scientists have discovered. In fact it is this wide variety of activities, as well as knowing that she is doing something useful, that helps Catherine Money enjoy being a scientist.



# Activities

## ACTIVITY 1

Because of the many ways people can use leather it has been a valuable material for thousands of years. See if you can find out about how leather has been used in the past:

- to carry water;
- in providing transport on land and sea;
- in providing shelter;
- as clothing;
- in art and music.

## ACTIVITY 2

Today leather is used in many ways.

- Find out what leather products you have at home.

Is the leather the same in the different products?

Have your neighbours some other types of leather goods?

- Find out about the use of leather today in:

industry

sport

clothing

books

musical instruments.

- See if you can find out why leather is such a good material for making shoes?

### ACTIVITY 3

Find out what materials can be used for tanning leather. Are the materials used today the same as those used in the past?

### ACTIVITY 4

Ask your art teacher if you can make something from leather or get a book from the library about leather work.



---

WRITTEN BY      HEATHER SPURLING  
                         AND DAVID SYMINGTON

ADVISORS        DR MARJORY MARTIN  
                         DR TOM SPURLING