

Bank note security features are reliable, and quick and easy to use. Protect yourself against loss and help keep counterfeit bank notes out of circulation. Check your notes! Make it a habit!

Bank notes are important to all of us! They are critical to Canada's economy. We all use them everyday, so counterfeiting can affect anyone.

As the sole issuer of Canadian bank notes, the Bank of Canada is committed to maintaining confidence in Canada's paper money. The Bank's role is to design, produce, and distribute highquality notes that are readily accepted and secure against counterfeiting.

- The Bank of Canada incorporates advanced security features in bank notes that are difficult to copy, yet easy to recognize and use
  - raises public awareness and use of the security features on bank notes through workshops, media interviews, and the distribution of educational material
  - partners with the Royal Canadian Mounted Police and provincial, regional, and municipal law-enforcement agencies in joint initiatives to deter counterfeiting activity in Canada

This pocket guide on bank note security features is a handy reference tool designed primarily for managers and trainers in the retail and hospitality industries, in financial institutions, as well as police officers.

This publication is part of a series of **free** materials, tools, and information services provided by the Bank of Canada to help you quickly, easily, and reliably identify genuine bank notes.

Together, we can protect our paper money against counterfeiting!

For information on the Bank's services:

- · Call 1-888-513-8212
- E-mail education@bankofcanada.ca
- Visit www.bankofcanada.ca/en/banknotes



Counterfeiting has been on the rise around the world because of easier access to improved computer technology that is relatively affordable. It is an international problem that also affects Canadians. Although the number of counterfeit notes detected in circulation in Canada is extremely small when compared with the more than one billion genuine bank notes in circulation, it is important that we all be vigilant.

Counterfeiting rates were lower in the 1980s. At that time, equipping a counterfeiting operation was an expensive and risky proposition. It was also a period during which U.S. currency was the prime target of counterfeiters.

Since the early 1990s, however, counterfeiting activity has risen, both in Canada and internationally, with the introduction of new technology.

From 1989 to 1993, the Bank of Canada introduced new \$20, \$50, and \$100 notes featuring an Optical Security Device (a metallic patch, refer to page 6). It is believed that the immediate decrease in counterfeiting that followed can be attributed to this new security feature.

As technology continues to evolve, so must our bank notes. In 2001, the Bank introduced the \$10 note from the *Canadian Journey* series, followed by the \$5 note in 2002. The Bank introduced the \$100 bill in March, the \$20 note in September, and the \$50 note in November of 2004. The Bank upgraded the security features on the *Canadian Journey* series \$10 note in 2005 and on the *Canadian Journey* series \$5 note in 2006.

New and more technologically advanced bank notes, combined with a better informed public, will make it increasingly difficult to counterfeit and pass false Canadian bank notes.

### Remember

- Most counterfeit notes are poor quality and can be easily detected.
- No denomination is exempt from the possibility of counterfeiting.
- All payment methods can be subject to fraud. Protect yourself. Learn how to use the security measures on bank notes.



## THE LAW

Sections 449, 450, and 452 of the Criminal Code of Canada indicate that no person shall make, possess or pass counterfeit money. An individual who contravenes any of these laws may be guilty of an indictable offence punishable by a prison term of up to 14 years.

Under the Copyright Act, the Bank of Canada owns the copyright on its bank note designs.

Making bank note images that infringe the Bank's copyright is an offence in certain circumstances.

Section 42(1) of the Copyright Act indicates that it is an offence to knowingly make for sale, sell, import for sale, or by way of trade, expose for sale or exhibit a copy of a work that infringes copyright. Anyone who is found guilty of this offence may be liable to a fine or imprisonment.

A copy of a bank note image will not infringe copyright if the Bank of Canada (the copyright owner) authorizes its reproduction. (Please refer to page 3.)

# REPRODUCING BANK NOTE IMAGES FOR COMMERCIAL PURPOSES

Although the Bank owns the copyright to the images on Canadian bank notes, we recognize that currency is an important symbol in Canada. Accordingly, people may wish to reproduce images of notes (or parts of notes) for special purposes—usually media reporting, advertising, education, or numismatics.

The Bank will ordinarily consent to the reproduction of bank note images if there is no risk that the reproduced image could be mistaken for a genuine note or be misused by counterfeiters, and if the proposed use does not compromise the dignity and importance of currency to Canadians.

To avoid the risk of potential criminal and civil consequences, anyone wishing to reproduce bank note images must first obtain the Bank's written permission and provide:

- > a brief statement of the purpose for copying a bank note image
- > a sketch of the proposed image
- a description of the proposed placement and distribution of material featuring the bank note image
- > the date by which the Bank's approval is requested

All requests for permission must be submitted in writing.

> Mail to: Bank of Canada 234 Wellington Street Ottawa, Ontario K1A OG9

- > F-mail to: education@bankofcanada.ca
- Complete an online form at www.bankofcanada.ca/en/banknotes/legislation/request.html

It is not necessary to request the Bank's permission to use bank note images for film or video purposes (for example, a television commercial), as long as the images are intended to show a general indication of currency and there is no danger that the images could contribute to counterfeiting.



### **KEY SECURITY FEATURES**

# Holographic Stripe

**Tilt the note,** and brightly coloured numerals (5, 10, 20, 50, or 100) and maple leaves will "move" within the shiny, metallic stripe on the front of the note. Colours will change through the various shades of the rainbow. There is a colour-split within each maple leaf. If you look carefully, smaller numerals (5, 10, 20, 50, or 100) appear in the background of the three-dimensional stripe. The stripe has curved edges.

# 2 Watermark Portrait

Hold the note to the light, and a small, ghost-like image of the portrait appears to the left of the large numeral (5, 10, 20, 50, or 100). A smaller numeral (5, 10, 20, 50, or 100) is also evident. This watermark is embedded in the paper and can be seen from both sides of the note. The watermark is only visible when the note is backlit.

# 3 Windowed Colour-Shifting Thread

Hold the note to the light, and a continuous, solid vertical line can be seen from both sides of the note. From the back of the note, this security thread resembles a series of exposed metallic dashes (windows) that shift from gold to green when the note is tilted. Small characters (CAN 5, 10, 20, 50, or 100) are printed on this security thread, which is woven into the paper.

### 4 See-Through Number

Hold the note to the light, and just like two pieces of a jigsaw puzzle, the irregular marks on the front and back form a complete and perfectly aligned numeral 5, 10, 20, 50, or 100. Look for this feature between the watermark and the large numeral (5, 10, 20, 50, or 100).

### Front of the note



Image of the note when held to the light



Image of the note when held to the light



Image of the note when held to the light



Image of the note when held to the light



Image of the note when held to the light

### Back of the note



Image of the note when not held to the light



Image of the note when not held to the light



Image of the note when not held to the light



Image of the note when not held to the light



Image of the note when not held to the light

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# ORIGINAL CANADIAN JOURNEY SERIES \$5 AND \$10 BANK NOTES

### KFY SECURITY FEATURES

# 5 Iridescent Maple Leaves

**Tilt the note**, and three maple leaves change from a faint image to a shiny gold colour. The outline of the leaves is clearly defined, and there are no detectable raised edges.

### 6 Hidden Number

Tilt the note at eye level, and the numeral (5 or 10) will become visible.

## **BIRDS OF CANADA SERIES BANK NOTES**

### KFY SECURITY FEATURES

# Optical Security Device (\$20, \$50, and \$100 notes)

**Tilt the note**, and the metallic patch changes colour from gold to green. This colour-shifting patch cannot be peeled off, and there are no detectable raised edges.

### 8 Planchettes

The notes feature **fluorescent** planchettes, or green dots, randomly scattered across both sides of all bank notes of the *Birds of Canada* series. These dots are uniformly round in shape, can sometimes be removed from the paper, and glow blue under a UV light.

### Front of the note





### Back of the note











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# OTHER SECURITY FEATURES ON CANADIAN JOURNEY AND BIRDS OF CANADA SERIES NOTES

# A Raised Print (Intaglio)

Run your fingers over the front of the note. The ink on the large numeral, the portrait, the coat of arms, the horizontal broad bands, and the words BANK OF CANADA—BANQUIF DIJ CANADA feels thicker to the touch

# **B** Fine-Line Printing

**Look** for the sharp, well-defined lines and/or microprinting (small, clearly defined characters) that form the portrait and the background patterns of the note (e.g. diagonal or wavy lines around the portrait and the vignette of the Parliament Buildings).

# **C** Fluorescence

Place the note under UV light, and the following elements become visible.

- · Canadian Journey series notes:
  - Look for the text BANQUE DU CANADA (5, 10, 20, 50, or 100) BANK OF CANADA glowing in interlocking colours of yellow and red over the portrait.
  - -Look for fibres, some glowing yellow and some glowing red, scattered randomly across both sides of the note. (The blue fibres, visible in normal light, do not glow.)
- Original Canadian Journey series \$5 and \$10 notes:
  - Look for the words FIVE-CINQ (or DIX-TEN), the coat of arms, and the text BANQUE DU CANADA BANK OF CANADA glowing blue over the portrait.
  - -Look for fibres, glowing red, scattered randomly across both sides of the note.
     (The blue fibres, visible in normal light, do not glow.)
- · Birds of Canada series notes:
  - Look for planchettes (small green dots), glowing blue, scattered randomly across both sides of the note. (These dots are uniformly round in shape and, sometimes, can be removed from the paper.)

# **D** Unique Colours and Serial Numbers

When you compare a genuine note with a suspect note, you may notice a difference in colour. The unique security inks used to produce the notes are difficult to simulate. All bank notes also have unique serial numbers printed twice on the back of every note. If you find two notes from the same series with the same serial number, at least one is a counterfeit!

### Front of the note















Back of the note





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### FEATURES FOR THE BLIND AND VISUALLY IMPAIRED

The new Canadian Journey series provides universal access to bank notes. Four different features have been introduced into the new designs to help blind and visually impaired Canadians recognize different denominations either by touch, by sight or by electronic signal. These design elements are not security features and should not be used to authenticate bank notes.



The new notes have a **tactile feature** located in the upper right corner on the face of the notes, consisting of a series of symbols formed by groupings of six raised dots that are separated by a smooth surface. The number and position of these symbols vary according to the denomination. These symbols are not Braille: they are a system developed in consultation with blind and visually impaired Canadians after research indicated that not all potential users can read Braille. The \$5 note has one symbol of six raised dots. The \$20 note has three, while the \$50 note incorporates four symbols. Like the \$10 note, the \$100 bank note has two symbols, but the smooth surface between them is much larger.



Large, high-contrast numerals that identify the note's denomination appear on both sides of the new notes. A dark numeral on a pale background appears on the front, and a white numeral against a dark background is on the back. In addition, colours that are similar to those used for the various denominations of previous series have been retained.



The Bank of Canada provides **bank note readers** that help the blind and visually impaired determine the denominations of the *Canadian Journey* and *Birds* of *Canada* series through machine-readable codes. These hand-held devices are able to inform the user of the bank note denomination in one of three user-selected ways: voice (English or French), tone, or vibration. Bank note readers are available free of charge through the Canadian National Institute for the Blind.





Although the following statements are true, the Bank of Canada does **not recommend** that you use any of these techniques to detect counterfeit notes.

- > The ink on a genuine bank note can be rubbed off but, by doing so, you reduce the effectiveness of the raised ink security feature.
- > The ink on a genuine bank note will remain intact in the crease of a folded note.
- > The ink on a genuine bank note will not run if water is applied to it.



# Remember: Bank note security paper does not normally fluoresce.

- If the entire face or back of a bank note fluoresces under UV light, rather than the specific features discussed, the note may be a counterfeit.
- However, a genuine note may fluoresce if it has been washed or has come into contact with cleaning agents.

### CANADIAN JOURNEY SERIES BANK NOTES: CELEBRATING CANADA'S HISTORY, CULTURE AND ACHIEVEMENTS

### \$5 note: Celebrating Children at Play

Young Canadians are the future of our nation, and play is a healthy part of their physical, social, and cultural development. Images of youngsters having fun tobogganing, learning to skate, and playing ice hockey capture the spirit and beauty of the Canadian winter. With snowflakes in the background, excerpts from Roch Carrier's book, *Le Chandail de hockey*,\* and its English adaptation by Sheila Fischman, *The Hockey Sweater*, evoke memories of childhood.

### \$10 note: A Tribute to Remembrance and Peacekeeping

A veteran and two young people observe a Remembrance Day service as members of the Land and Naval Forces stand vigil. A member of the Armed Forces in a peacekeeping role complements the scene. The first verse of John McCrae's poem, In Flanders Fields, and its French adaptation, Au champ d'honneur,

by Jean Pariseau, are featured together with doves and a wreath of poppies, which symbolize peace and commemoration.

### \$20 note: Celebrating Canadian Arts and Culture

Our nation's visual, literary, and performing arts enrich the lives of all Canadians. The artwork of Bill Reid, inspired by the Haida culture of the northwest coast, was chosen to illustrate this theme. The \$20 note also features an excerpt from renowned Canadian author Gabrielle Roy's novel *La montagne secrète*, published in 1961, and the English translation by Harry L. Binsse, *The Hidden Mountain*, published in 1962. The quotation\* reminds us that arts and culture define who we are, as well as the system of beliefs, values, and customs that we share.

\* Used by permission, McClelland & Stewart Ltd. The Canadian Publishers.

<sup>\*</sup> Le Chandail de hockey was published by Éditions Alain Stanké: the English adaptation was published by House of Anansi Press,

# \$50 note: Celebrating Nation Building—Shaping the Political, Legal, and Social Structures for Democracy and Equality

This note celebrates Canadians who have campaigned for the rights and freedoms that every citizen of Canada now enjoys. The **Thérèse Casgrain Volunteer Award** commemorates Thérèse Casgrain's lifelong campaign for social justice and equality and recognizes volunteers for their pioneering spirit and commitment to helping others. The **statue of the Famous Five**—Emily Murphy, Nellie McClung, Irene Parlby, Henrietta Muir Edwards, and Louise McKinney
—celebrates their victory in the 'Persons' Case. On 18 October 1929, the
British Privy Council declared that women are persons, thus making them eligible to be appointed to the Senate of Canada. The featured

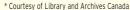
### \$100 note: Celebrating Canadian Exploration and Innovation

The themes of exploration and innovation are illustrated with images of Canadian achievements in cartography and communications. A map of Canada created by Samuel de

Champlain in 1632\* is paired with a birchbark canoe and juxtaposed by a satellite image of the country and depictions of Radarsat-1 and a telecommunications antenna. An excerpt from Miriam Waddington's poem, Jacques Cartier in Toronto, and its French translation by Christine Klein-Lataud, summarizes humanity's eternal quest for discovery.

quotation is from the Universal Declaration of Human Rights, first

drafted by Canadian John Peters Humphrey.



### BIRDS OF CANADA SERIES BANK NOTES: A CELEBRATION OF CANADIAN WILDLIFE

Birds native to Canada were the focal point for the illustrations on the backs of the 1986 series of bank notes.

\$5 note: Belted Kingfisher

\$10 note: Osprey—Provincial bird of Nova Scotia \$20 note: Common Loon—Provincial bird of Ontario \$50 note: Snowy Owl—Provincial bird of Quebec \$100 note: Canada Goose—Canada's national bird

# BANK NOTE SECURITY FEATURES ARE RELIABLE. AND QUICK AND EASY TO USE!

Feel the difference! See the difference! Secure paper money: It's in your hands!



### Touch the raised surfaces on your money.

The ink feels thicker to the touch. The security paper used to produce bank notes also has a unique feel. It is very different than ordinary paper.



### Tilt your money.

Look for the changing colours and images:

- holographic stripe (front of Canadian Journey notes)
- windowed security thread (back of Canadian Journey notes)
- iridescent maple leaves (front of original *Canadian Journey* \$5 and \$10 notes)
- hidden number (front of the original Canadian Journey \$5 and \$10 notes)
- optical security device (front of Birds \$20, \$50, and \$100 notes)



### Look through your money (Canadian Journey series).

Hold the note to the light and look for the:

- watermark portrait (front and back)
- windowed security thread (front and back)
- see-through number (front and back)



### Look at your money.

Observe the intricate details of the note:

- fine-line patterns—well-defined lines that form background designs (all notes of both series)
- · microprinting —small, clearly defined characters within the diagonal or wavy lines around the portrait and the vignette of the Parliament Buildings (all notes of both series)
- security fibres (front and back of all Canadian Journey notes)
- planchettes (front and back of all Birds of Canada notes)









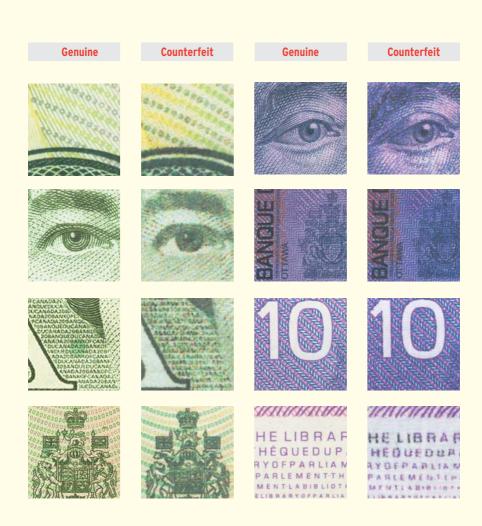


Together, we can protect bank notes against counterfeiting!

#### Remember

- · Always check two or more security features.
- It is important to check for the behaviour of the security feature, not just its presence.
- Compare a suspect note against one you know to be genuine.
- · Look for differences, not similarities.
- Check all bank notes that you accept. It takes only seconds to distinguish a genuine note from a fake one. It's as simple as checking to make sure you receive the correct change.

# MAGNIFIED SAMPLES OF FINE-LINE PRINTING FOR COMPARISON



# WHAT TO DO WITH A SUSPECTED COUNTERFEIT NOTE

# If you are a cash handler:

- Stop the transaction, request another note, and if possible, keep the suspected counterfeit.
- **Call** your supervisor, security officer, and/or the local police.
- Record the details of how you received the note (time, number of notes, denomination, context, description of the individual(s) who gave you the note, etc.).
- Give the note only to the police and always request a receipt.

  If the note is genuine, it will be returned to you. (It is your responsibility to return a genuine note to the person from whom it was originally received.)

The authenticity of suspect bank notes will be assessed by local authorities. All counterfeit notes will be sent to the RCMP's Bureau for Counterfeit and Document Examinations in Ottawa for further testing.

### Remember

- It is a criminal offence to knowingly use or possess a counterfeit bank note.
- You are not permitted to keep a counterfeit note for the purposes of training or instruction. It must be given to the police.
- · Counterfeits should be given only to the police.
- Those who pass counterfeit notes may be innocent victims of crime.
- The reproduction of bank notes is restricted under the Criminal Code and the Copyright Act (see page 2).

### **QUESTIONS?**

The Bank of Canada provides educational material and services that are available by:

- · Calling 1-888-513-8212
- Faxing your request to (613) 782-7533
- · E-mailing education@bankofcanada.ca
- · Visiting the Bank of Canada's website www.bankofcanada.ca/en/banknotes

In addition to its head office in Ottawa, which houses the **Currency Museum**, the Bank of Canada operates five regional offices across the country. They can be reached as follows:

### British Columbia and the Yukon

200 Granville Street, Suite 2710 Vancouver, British Columbia V6C 1S4

Telephone: (604) 643-6225 Toll-free: (800) 388-8427 Facsimile: (604) 643-6240

### Prairie Provinces, Nunavut, and Northwest Territories

404-6th Avenue SW, Suite 200 Calgary, Alberta T2P 0R9 Telephone: (403) 215-6700 Toll-free: (800) 388-8995 Facsimile: (403) 215-6710

### **Ontario**

5990 Explorer Drive Mississauga, Ontario L4W 5G3 Telephone: (905) 206-2536 Toll-free: (866) 601-1381 Facsimile: (905) 206-2591

### Quebec

1501 McGill College Avenue, Suite 2030 Montréal, Quebec H3A 3M8 Telephone: (514) 496-4829 Toll-free: (800) 388-8991 Facsimile: (514) 496-4836

### **Atlantic Provinces**

1583 Hollis Street, 5th Floor Halifax, Nova Scotia B3J 1V4 Telephone: (902) 420-4600 Toll-free: (800) 417-0144 Facsimile: (902) 420-4644

