CITES Identification Guide - Turtles and Tortoises

Guide to the Identification of Turtles and Tortoises Species Controlled under the Convention on International Trade in Endangered Species of Wild Fauna and Flora

Guide d'identification CITES - Tortues

Guide d'identification des tortues protégées par la Convention sur le commerce international des espèces de faune et de flore sauvages menacées d'extinction

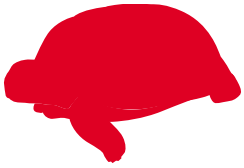
Guía de identificación de CITES - Tortugas

Guía de identificación de las tortugas protegidas por la Convención sobre el Comercio International de Especies Amenazadas de Fauna y Flora Silvestres

An initiative of Environment Canada and PROFEPA (SEMARNAP)

Une initiative d'Environnement Canada et de PROFEPA (SEMARNAP)

Una iniciativa del Ministerio del Medio Ambiente del Canadá y de PROFEPA (SEMARNAP)



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Humane Society of the United States

The Humane Society of the United States (HSUS), a non-profit organization founded in 1954, is devoted to making the world safe for animals through legal, educational, legislative, and investigative means. As an animal protection organization, the mission of The HSUS is to create a humane sustainable world for all animals, including people. The HSUS is dedicated to speaking for animals, who cannot speak for themselves.

The HSUS works on numerous turtle conservation and protection projects including: initiating and supporting efforts to gain protection for turtle species under domestic and international law; investigating and providing information to the public, lawmakers and regulatory bodies on the cruel treatment of turtles in the pet trade, by the fisheries industry, and in the food and medicinal trades; working with industry and government to design improvements in live turtle transport; and insuring that domestic laws protecting turtles are implemented and enforced.

Fondée en 1954, la Humane Society of the United States (HSUS) est une organisation à but non lucratif qui se consacre à la protection des animaux en employant des moyens juridiques et législatifs ainsi qu'en menant des enquêtes et des activités éducatives. La HSUS a pour mission de créer un monde durable et sans cruauté pour tous les animaux, y compris les humains. La HSUS parle au nom des animaux, qui ne peuvent plaider eux-mêmes leur cause.

La HSUS mène de nombreux projets de conservation et de protection des tortues, par exemple : introduire et soutenir des mesures visant à obtenir la protection juridique des tortues aux niveaux national et international; enquêter sur le traitement cruel des tortues dans le commerce des animaux de compagnie et des produits alimentaires et médicinaux, ainsi que dans l'industrie de la pêche, et en informer le public, les législateurs et les organes de réglementation; collaborer avec l'industrie et les gouvernements à l'amélioration du transport des tortues vivantes; veiller à ce que les lois nationales qui protègent les tortues soit mises en oeuvre et appliquées.

La Humane Society of the United States (HSUS), organización protectora de animales fundada en 1954 sin fines de lucro, está dedicada a hacer que el mundo sea más seguro para los animales, empleando medios jurídicos, educativos y legislativos y haciendo investigaciones. Su misión es crear un mundo humanitario y sostenible para todos los animales, incluyendo a las personas. La HSUS está dedicada a hablar por los animales, que no pueden hablar por sí mismos.

La HSUS trabaja en numerosos proyectos de protección y conservación de tortugas, entre ellos los siguientes: iniciar y apoyar gestiones para conseguir la protección de especies de tortugas en leyes internacionales y nacionales; investigar el tratamiento cruel de tortugas en el comercio de animales de compañía, la industria pesquera y el comercio de fármacos y alimentos, e informar al respecto al público, legisladores y órganos normativos; trabajar con la industria y el gobierno para idear mejoras en el transporte de tortugas vivas, y asegurar que las leyes nacionales que protegen a las tortugas se implementen y apliquen.

Traffic North America

TRAFFIC North America is part of the global TRAFFIC Network, the world's largest wildlife trade monitoring program. TRAFFIC is a joint progam of World Wildlife Fund and IUCN – The World Conservation Union.

TRAFFIC aims to help ensure that wildlife trade is at sustainable levels and in accordance with domestic and international laws and agreements. Established in 1976, TRAFFIC is now a network of 21 offices organized in seven regional programs.

TRAFFIC Amérique du Nord

TRAFFIC Amérique du Nord fait partie du réseau mondial TRAFFIC, le plus grand programme au monde de surveillance du commerce de la faune and de la flore sauvage. Il s'agit d'un programme conjoint du Fonds mondial pour la nature et l'UICN – l'Union mondiale pour la nature.

TRAFFIC vise à s'assurer que le commerce d'espèces sauvages se fasse dans le respect de leur capacité de renouvellement et conformément aux lois et ententes nationales et internationales. Créé en 1976, TRAFFIC est maintenant constitué d'un réseau de 21 bureaux regroupés en sept programmes régionaux.

TRAFFIC Norteamérica

TRAFFIC Norteamérica forma parte de la Red mundial TRAFFIC, el programa mundial más importante de vigilancia del comercio de la fauna. TRAFFIC es un programa conjunto del Fondo Mundial para la Naturaleza y de UICN – Unión Mundial para la Naturaleza.

El objetivo de TRAFFIC es garantizar que el comercio de la fauna silvestre se realiza de forma sostenible y respetando las leyes y acuerdos nacionales e internacionales. Establecida en 1976, TRAFFIC es en la actualidad una red de 21 oficinas organizadas en siete programas regionales.

CEC

The Commission for Environmental Cooperation (CEC) is an international organization whose members are Canada, Mexico and the United States. The CEC was created under the North American Agreement on Environmental Cooperation (NAAEC).

The objectives of the NAAEC include building regional cooperation for conservation, protection and enhancement of the environment, as well as implementing international agreements and domestic law and policy. It also commits the Parties to effectively enforce their respective environmental laws, concerning the protection of wild flora and fauna, endangered species, their habitat, and specially protected areas.

CCE

La Commission de coopération environnementale (CCE) est une organisation internationale dont les membres sont le Canada, les États-Unis et le Mexique. La Commission a été créée en vertu de l'Accord nord-américain de coopération dans le domaine de l'environnement (ANACDE).

Les objectifs de l'ANACDE consistent à renforcer la coopération régionale à des fins de conservation, de protection et d'amélioration de l'environnement, ce qui comprend l'application des accords internationaux et des lois et politiques nationales. L'Accord oblige également les Parties à appliquer efficacement leurs lois respectives sur l'environnement, lesquelles incluent les lois protégeant la flore et la faune sauvages de même que les espèces menacées de disparition, leurs habitats et les aires protégées.

CCA

La Comisión para la Cooperación Ambiental (CCA) es una organización internacional integrada por Canadá, EU y México. Fue creada en términos del Acuerdo de Cooperación Ambiental de América del Norte (ACAAN).

Entre los objetivos del ACAAN se incluye el fortalecimiento de los esquemas de cooperación regional para el incremento del nivel de conservación y protección del medio ambiente, incluyendo el cumplimiento tanto de los acuerdos internacionales como de las leyes y políticas de cada país. En este sentido, el ACAAN compromete a las partes para hacer cumplir eficazmente sus respectivas leyes ambientales, incluyendo aquellas sobre la protección de flora y fauna silvestre, comprendiendo las especies en peligro y sus hábitats, y muy particularmente las áreas naturales protegidas.

English ➡

Français ➡

Español ➡

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- English
- Français
- Español

Table of Contents — English Section

Foreword

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), also known as the Washington Convention, has an impact on the lives of all Canadians and on the wildlife species with which we share our planet. Every time a new country signs CITES, the international effort to protect wildlife species is strengthened.

Becoming a signatory to CITES entails a number of obligations. Each party must designate an administrative body, scientific authorities and a fraud prevention unit, all of which are actively involved in the application of the Convention.

The many tasks involved in implementing CITES — issuing and verifying the necessary permits, inspecting goods, caring for live animals and ensuring proper storage of perishable derivatives — all require qualified, concerned personnel. Since none of the parties to CITES is in a position to allocate the human or financial resources required to ensure strict border control, each CITES administration must work with other organizations to achieve its objectives. These organizations have a variety of different mandates which support the requirements of the Convention and the legislation governing it.

These organizations often feel they are not properly qualified and that it is best to leave the application of CITES up to the experts. On the contrary, most people responsible for enforcing CITES, whether they be customs officers, police officers, conservation officers, or plant and animal product inspectors, are able to perform a number of essential tasks, such as identifying specimens and checking permits.

Environment Canada has developed a series of easy-to-use guides that do not require an advanced level of training. They are designed to help front-line staff effectively control transborder movements of controlled goods.

This guide on turtles was developed in cooperation with our colleagues in Mexico (PROFEPA). This pooling of efforts and resources has resulted in the production of a high-quality tool.

I hope that this guide will motivate you in your efforts to prevent illegal trade in wildlife species and will contribute to the protection of animals threatened by international trade.

Yvan Lafleur
Chief, Wildlife Division
Office of Enforcement
Environment Canada

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Richard Charette
National Coordinator, Inspections
Office of Enforcement
Environment Canada

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Message to customs officers and other inspectors responsible for enforcing CITES

Several turtle and tortoise species are currently endangered not only as a result of the destruction of their natural habitat, but also because of intensive international trade targeting them as pets or for their parts and derivatives. **You can help change this situation** by participating actively in controlling trade in turtles and tortoises in your country.

This guide was created to enable you to identify turtles and tortoises mostly found in trade, protected or not by CITES (see **?-2**). It is designed to meet a need expressed by customs officers from various countries for an identification tool that is **easy to use. No previous knowledge of turtles and tortoises is required.** By following the steps described, you will be able to identify the species of turtles and tortoises currently traded in the world.

With a few minor differences, the guide follows the same format as the *CITES Identification Guide – Crocodilians*, with which you may already be familiar.

The **key pages in the green section** of the guide present illustrations which highlight the morphological characteristics that distinguish different species. You begin the identification process by comparing the morphological features of your specimen with those illustrated in these key pages. From here, you will be directed to the **descriptive pages in the blue and yellow sections**, where you will find illustrations of the species and additional information that will help to confirm your identification.

The blue section of the guide contains illustrations of the most easily recognizable species. You will have no difficulty identifying these species. This section will help you to sharpen your powers of observation, preparing you for the yellow section.

The yellow section contains species that are sometimes very similar in appearance. It is critical to pay close attention to details in order to distinguish one species from another. With practice, you will be able to identify virtually all species found in these two sections with relatively little difficulty.

The guide can be used by any CITES-enforcement officer, from beginner to expert. The level of difficulty increases from the blue section to the yellow section.

The orange section contains a list of species that must be identified by an expert, i.e., a specialist in herpetology (the science that deals with reptiles) who has been designated by CITES authorities in your country to act as a resource-person in this field.

Before you begin working with the guide, be sure to read the introduction in the purple section, which describes the identification process. You will then be ready to take up the identification challenge. We are confident that you will succeed with flying colours.

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What is CITES?

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement signed by more than 140 countries that regulates trade in a number of species of plants and animals, their parts and derivatives. The names of these species appear in a **Control List** that is updated every two years, following the meeting of the Parties to the Convention. The list provides the names of CITES species and indicates whether they are Appendix I, II or III species.

Appendix I species are rare or endangered. Trade in these species for primarily commercial purposes is prohibited. As a result, Appendix I species must be accompanied by a CITES export permit issued by the exporting country and a CITES import permit issued by the importing country.

Appendix II species are neither rare nor endangered at present, but could become so if trade is not regulated. The species in Appendix II must be accompanied by an appropriate CITES export permit issued by the exporting country before entry to the importing country will be allowed.

Appendix III species are not endangered but are subject to special management within the listing country (as indicated in parentheses beside the Appendix number). Species in Appendix III must be accompanied by an appropriate CITES export permit issued by the exporting country if the trade is with the listing country, or by a certificate of origin or a re-export certificate if the trade is with a country other than the listing country, as required by the Convention.

Note these icons used throughout the guide:

Appears with Appendix I, II or III species, indicating trade is regulated by CITES and must be verified by the necessary CITES permit(s)

Trade in this species is not regulated by CITES and does not require a CITES permit

Detain and refer to an expert for identification

What species are illustrated in the guide?

This guide deals not only with species **protected by CITES** but also with some commercial species that are **not protected by CITES**. Illustrations are provided of the following:

- all species or genera in Appendix I, II or III of the CITES Control List, in effect since June 1997;

- certain commercial species not protected by CITES but soon likely to be or mistaken for CITES species.

The illustration always represents the nominal species (e.g., *Caretta caretta*) when there are no subspecies, and the nominal subspecies (e.g., *Eretmochelys imbricata imbricata*) in the case of several subspecies in the same species. To identify other subspecies which are not illustrated (e.g. *Eretmochelys imbricata bissa*), you may need to consult an expert.

All CITES species are accompanied by this familiar icon, taken from the previous Guides.

I must verify the identification of a turtle or a tortoise declared on a CITES permit: what do I do?

In Index B (see ?-18), find the name that appears on the permit and note the scientific name (second column) and the pages of the different sections to be consulted.

- SPECIES LISTED IN INDEX B
  - Turn to the page in the guide where the species is illustrated and compare the specimen being shipped with the illustration.
    - NOT ILLUSTRATED → **Refer to a specialist for identification**
    - ILLUSTRATED
      - Illustration identified by a scientific name and accompanied by 
        - Specimen corresponds to the illustration
        - Check to see whether the number of specimens declared on the permit is accurate
          - NUMBER ACCURATE
            - Verify the status **(Appendix I, II or III)** of the species in the most recent CITES Control List
            - Verify the validity of the CITES permit (see ?-4)
              - VALID → **Allow Entry***
              - INVALID → **Deny Entry**
          - NUMBER INACCURATE → **Deny Entry**
      - Illustration referring to the orange section and accompanied by 
        - Specimen corresponds to the illustration
        - Consult Index A (see ?-17) for the common names
        - Verify the status **(Appendix I, II or III)** of the species in the most recent CITES Control List
        - **Refer to an expert for identification**
      - Specimen does not correspond to the illustration → **Deny Entry**
- NOT LISTED → **Refer to a specialist for identification**

*Check to see whether the species is subject to any other form of control.

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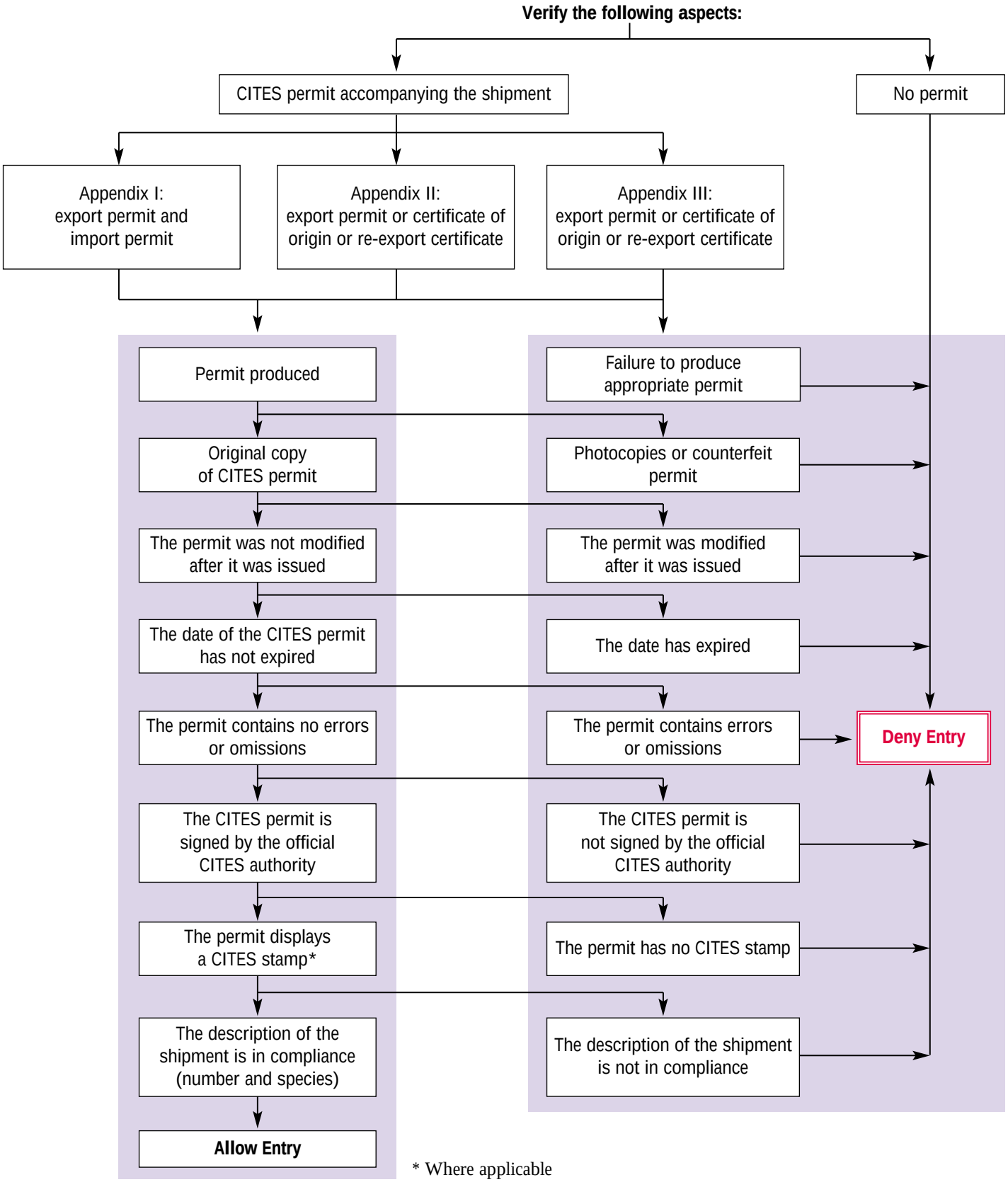
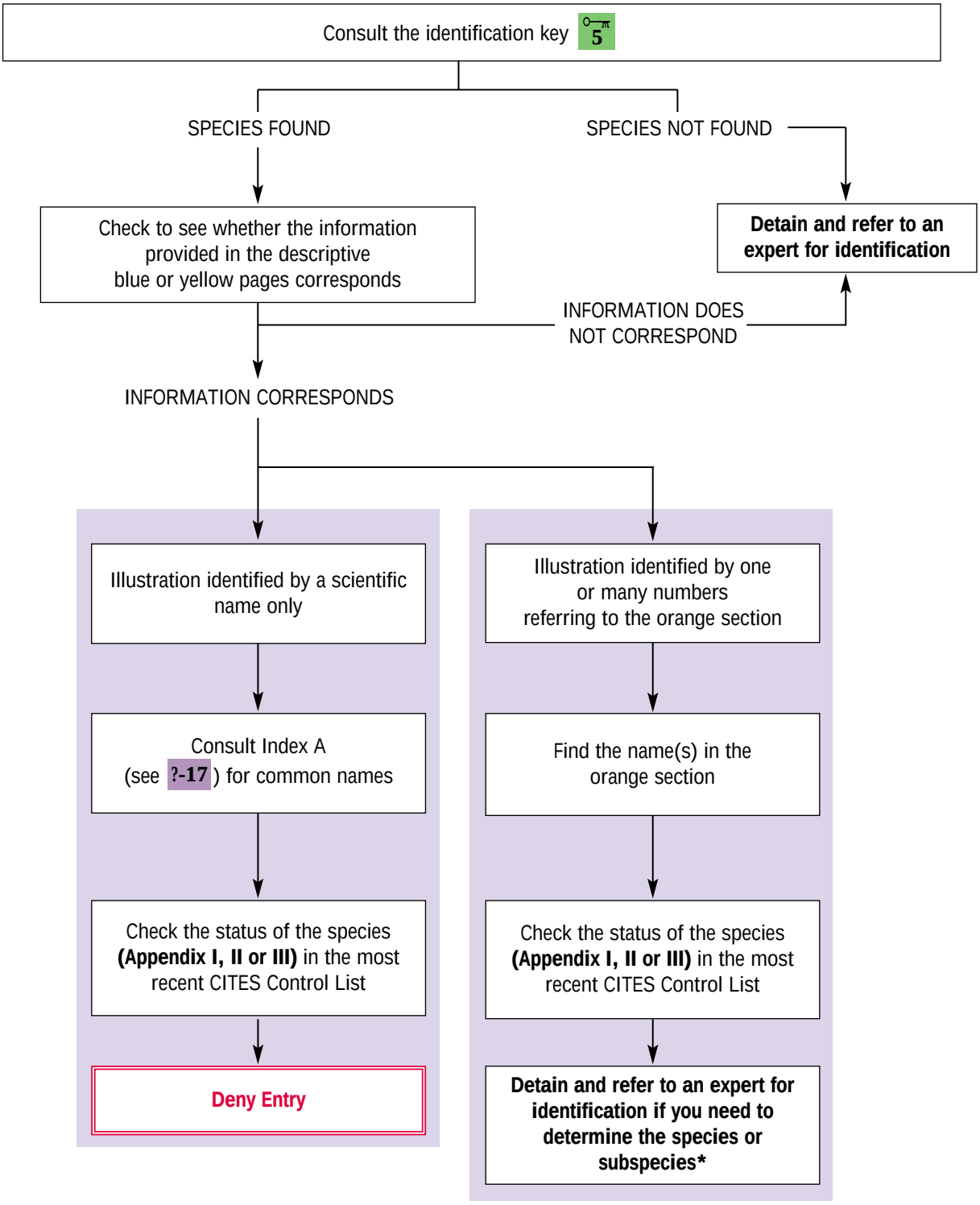
How to determine the validity of a CITES permit?



* Where applicable

I must identify a turtle or a tortoise that is not accompanied by a CITES permit: what do I do?



* The subspecies identification is necessary only if one of the subspecies of a given species is protected under CITES.

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Example of the identification process

The identification process is based on an examination of a number of the specimen's morphological characteristics. By following the process in the key, you will be able to identify the most probable species. Using the illustrations and information provided in the blue or yellow descriptive pages, you will be able to confirm the identification.

When handling live specimens, avoid being bitten. Remember that even the smallest specimens can cause serious injury. Hold turtles by the sides of their carapace, out of reach of their jaws and claws. To avoid bacteriological contamination, always wash your hands with an antibiotic soap after handling specimens or wear gloves.

The characteristics of young specimens sometimes differ considerably from those of adults, particularly with respect to carapace development and colouration. In more mature specimens, the once bright colours become muted and the carapace becomes unserrated. These differences will be pointed out in the descriptive pages. Do not hesitate to consult an expert if you have any doubts.

Take, for example, the turtle illustrated on this page:

EXAMPLE

The first step is to familiarize yourself with the morphological characteristics that will be used in the identification key. Pages 1 to 4 provide a series of illustrations that highlight the characteristics and define the terminology used. Once you are familiar with these terms, you can begin the identification process, using the identification key. Consult **all** the identification key pages 5 to 10 in their order. **To make a correct identification, it is important to consult each of these pages.**

EXAMPLE (continued)

Bear in mind that **the species on the key pages are examples** selected from various species that have similar morphological characteristics. Do not try to match your specimen with one of the illustrations on the key pages, but with an illustration on the indicated descriptive page. The key pages illustrate the characteristics, while the descriptive pages illustrate the species.

Key page 5 begins with illustrations of families of turtles with **oar-like limbs and one, two or no claws**. Only seven sea turtles (all protected under CITES) and the Pig-nose Turtle have these characteristics. As you can see, our sample specimen does not have these characteristics, so we proceed to the next section at the bottom of page 5.

This section illustrates one tortoise *Malacochersus tornieri* (family Testudinidae) with **elephant-like feet, unwebbed toes and a very flattened, pancake-like carapace.** A closer look at our specimen shows that it does not have elephant-like feet or a very flattened carapace, and has webbed toes. As indicated at the bottom of the page, turn to page 6.

Page 6 illustrates other land-dwelling tortoises (Testudinidae), all protected under CITES, that have **elephant-like feet with unwebbed toes, and a domed carapace.** Our specimen has webbed toes and a more flattened carapace, adapted for moving around in aquatic environments. We now turn to page 7, where we will find species with webbed feet and a flattened carapace.

The first section on 7 presents the family Trionychidae, turtles that have a **soft carapace with no scales**. Our sample specimen has well-defined scales which make the carapace somewhat rigid, so we know that it is not a member of the softshell family.

The next section illustrates the families Chelidae (Austro-American side-necked turtles) and Pelomedusidae (Afro-American side-necked turtles). A species belonging to one of these two families folds its neck to the side beneath the carapace, unlike other turtles which retract their neck straight back into their shell. The key for these two families stresses that the total number of **plastral scales is 13** due to the presence of an intergular scale. Other species of turtles have only 12 scales. By examining the plastron of our specimen, we see that it has 12 scales and we move on to page 8.

EXAMPLE (continued)

Page 8 illustrates three families of turtles (Dermatemydidae, Chelydridae, Platysternidae), which comprise only four species, all of which are easily recognizable by the **presence of inframarginal scales** (in red). The two members of the family Chelydridae have a **cross-shaped plastron**, while the single species of the family Platysternidae has an **oversized head** which it cannot retract into its carapace. Since the plastron of our specimen does not have inframarginal scales and bears no resemblance to the four plastrons illustrated, we go to page 9.

Page 9 presents the family Kinosternidae, the only family that has **23 marginal scales** on the carapace. All other families have 24 or 25. Since our specimen has 25 marginal scales, we know that it does not belong to this family.

The next section on page 9 presents the family Emydidae which includes most of the freshwater turtles. The key begins by identifying turtles that have a **hinged plastron**, which allows a portion of the plastron to be drawn up against the carapace for greater protection. This hinge is sometimes rudimentary in juveniles or adults of some species. To find out if a hinge is present, exert pressure on the tip of the plastron to see if it is flexible. By examining our specimen we find the plastron is not flexible and so does not have a hinge. As a result, we turn to page 10.

Page 10 completes the presentation of the family Emydidae. Here we must determine whether our specimen has **one, three or no keels**. Although keels are usually visible, it is sometimes easier to detect these elevations by touching the carapace. The fact that keels can completely disappear with age is noted for several species in the descriptive pages. Our sample specimen has only one keel, so we now determine whether the posterior margin of the carapace is **serrated or not**. Serrations can also disappear with age, so do not hesitate to consult several sections of the guide (with or without keels or serrations) if you need to identify a more mature specimen. Our specimen shows a serrated posterior margin, and so we are directed to descriptive page 51.

Page 51 begins with a brief presentation of the family (see ?-15) Emydidae, including a silhouette and some characteristics at the top of the page. The text in the shaded bar indicates that 12 species in this family belong to Appendix I or II and are therefore subject to CITES controls, as indicated by the icon. Any of these 12 species must be accompanied by a valid CITES permit. The other 82 species are not protected under CITES, but may be subject to controls in your country.

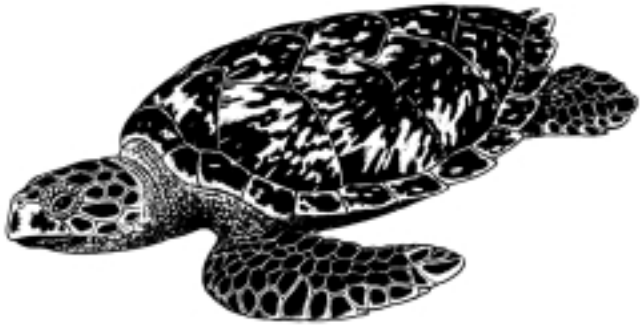
To complete the identification, quickly leaf through all the suggested descriptive pages. Follow the arrows at the bottom of the page that indicate the next suggested page. For our specimen, we consult pages **51** through **55**.

Our specimen appears to be the species *Pseudemys scripta*, illustrated on page **52**. The species name is preceded by the icon, which indicates it is not subject to CITES controls. Using the scientific name *Pseudemys scripta*, you can refer to Index A (see **?-17**) for the corresponding common names in French, English and Spanish.

When you put this identification process into practice, if your specimen has obvious distinguishing characteristics, you should have no trouble recognizing the corresponding illustration. If you are uncertain, return to suggested descriptive pages, and take a closer look at the illustrations on each page. **Remember that within a species of turtles, there may be significant variations between specimens, depending on their geographic distribution, sex and subspecies.** Characteristics such as the arrangement and shape of the scales or the patterns on the carapace and plastron vary, and **therefore your specimen may look slightly different from the illustration in the guide**.

Page **55** presents species, where both juveniles and adults have rudimentary keels or serrations. Given that these characteristics are easy to miss, you are directed to these species illustrated elsewhere in the guide. If you have not already identified your specimen, consult the pages indicated on **55** for detailed descriptions.

OTHER CASES



Eretmochelys imbricata

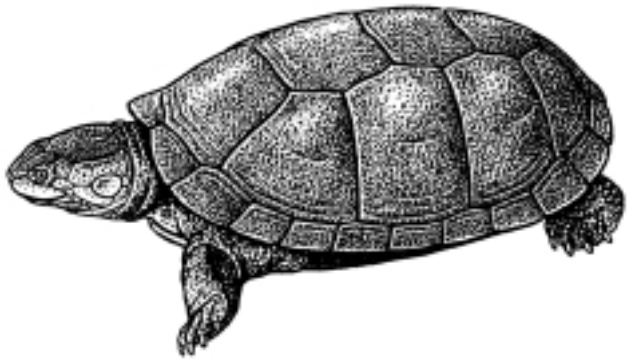
If the species is accompanied by the icon, you must proceed with the customs formalities required for CITES control purposes. Begin by verifying the status of the species (Appendix I, II, or III) in the most recent CITES Control List, then check the validity of the CITES permit(s) required for that particular species (see **?-4**). If the permits are in order, the entry of the species can be allowed, unless it is subject to other controls in your country.

E
?

Because all subspecies of *Eretmochelys imbricata* are protected under CITES, it is unnecessary to identify the subspecies or consult an expert. When only one of the subspecies is protected under CITES or under a specific statute in your country, an expert should be consulted.

In the example on the previous page, note the icons depicting parts and derivatives obtained from this species (see ?-14). These icons indicate that the meat, eggs and carapace of this species are in trade, as well as jewelry made from its carapace.

When the illustration of a species is accompanied by one or more numbers and the icon , as is the case on page 30, the identification should be referred to an expert. Consult the orange section (see ?-16) for the suggested turtle name or names and forward them to the expert to aid in identification. The orange section also lists all turtle species which are not illustrated in the guide.



Spp. PE-1-5-8-10 1

Identification key for plastrons

To identify a plastron consult pages 13 to 27. You will find illustrations of all plastrons, arranged by morphological characteristics. When you find the illustration that corresponds to your specimen, refer to the indicated descriptive page for more detailed information.

What is the purpose of the coloured tabs?

The ? section explains **how to use the guide**.

The section contains the key pages where the **identification process begins**.

The blue section contains the illustrations of species of **turtles and tortoises that are easily recognizable.**

The yellow section contains illustrations of species or subspecies of **turtles and tortoises that require closer observation** or that must be referred to an expert.

The orange section contains a **list of species of turtles and tortoises that must be referred to an expert and the list of species not illustrated in the guide.**

The grey section contains **Index A**, which provides the **scientific names** of all illustrated species. The scientific names are in alphabetical order and are accompanied by their **common names** in English, French and Spanish.

The dark grey section contains **Index B**, which provides an **alphabetical list of the scientific and common names of each species.** It also includes the pages where they are found in the guide.

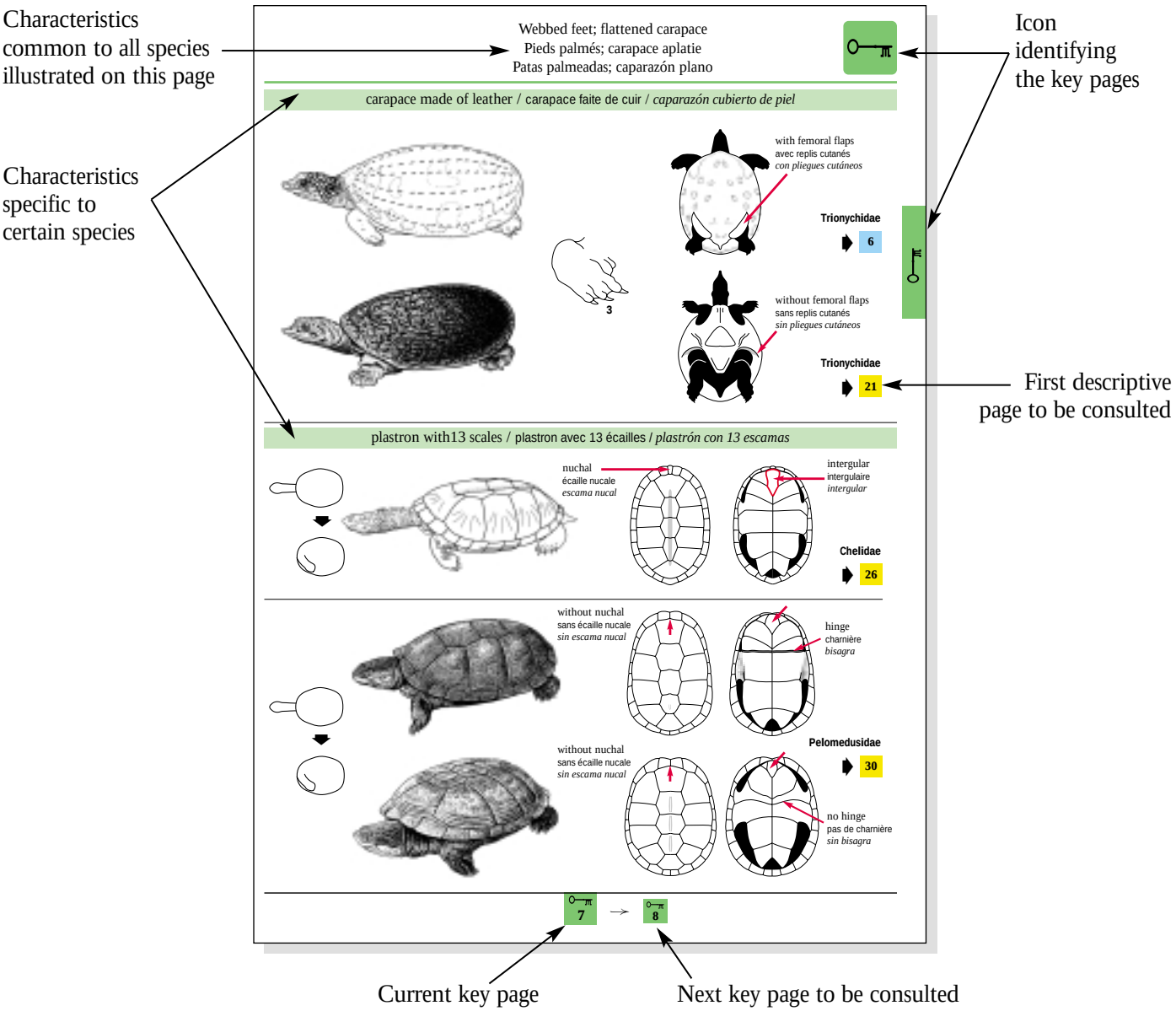
E ?

What is the purpose of the key pages?

Key pages 1 to 4 describe the morphological characteristics of the turtles used in the identification key, and provide definitions of the technical terms used in the key.

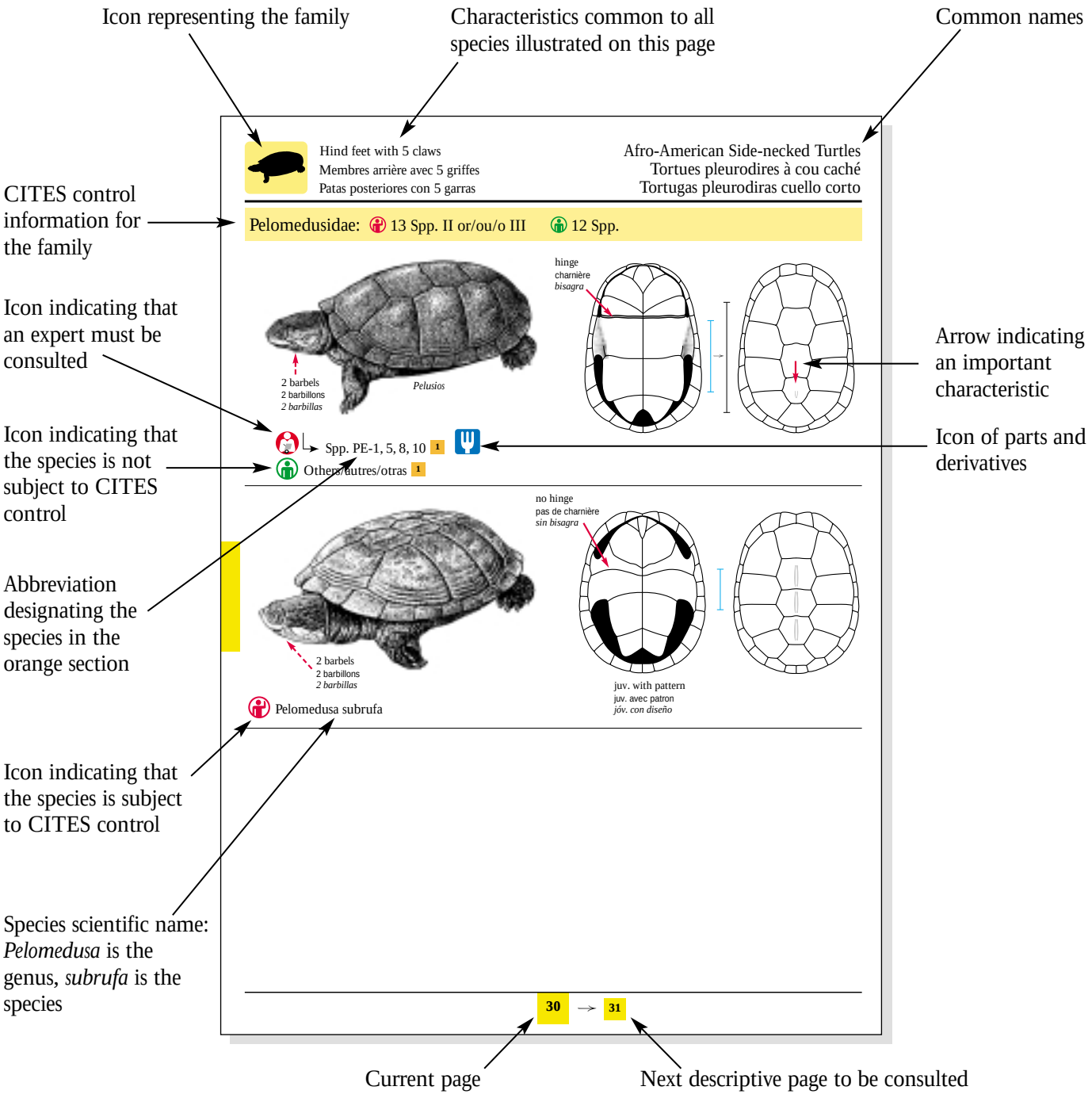
The identification key begins on 5 through to 10. It is important to remember that **species illustrated here are just examples**. Do not try to match your specimen with one illustrated in the key pages. The key pages are designed simply to highlight certain characteristics. These characteristics lead you to the descriptive pages in the blue and yellow sections where you will make your identification.

Key pages 11 to 12 contain photographs of parts and derivatives while pages 13 to 27 contain the plastron identification key.



What is the purpose of the descriptive pages?

The descriptive pages illustrate the different species of turtles.



E ?

What do the icons of parts and derivatives signify?

These icons appear after the scientific names in the blue and yellow sections. They indicate there is significant trade for a species in the form of:

Food products, e.g., canned meat

Leather goods, e.g., boots, wallets, purses, belts

Carapaces, e.g., musical instruments, hair combs, small boxes

Eggs

Jewelry, e.g., necklaces, bracelets, earings, eyeglass frames

Various products, e.g., traditional Asiatic medicines, lamps, stuffed specimens

Oil

Please consult pages 11 y 12 for examples of these parts and derivatives.

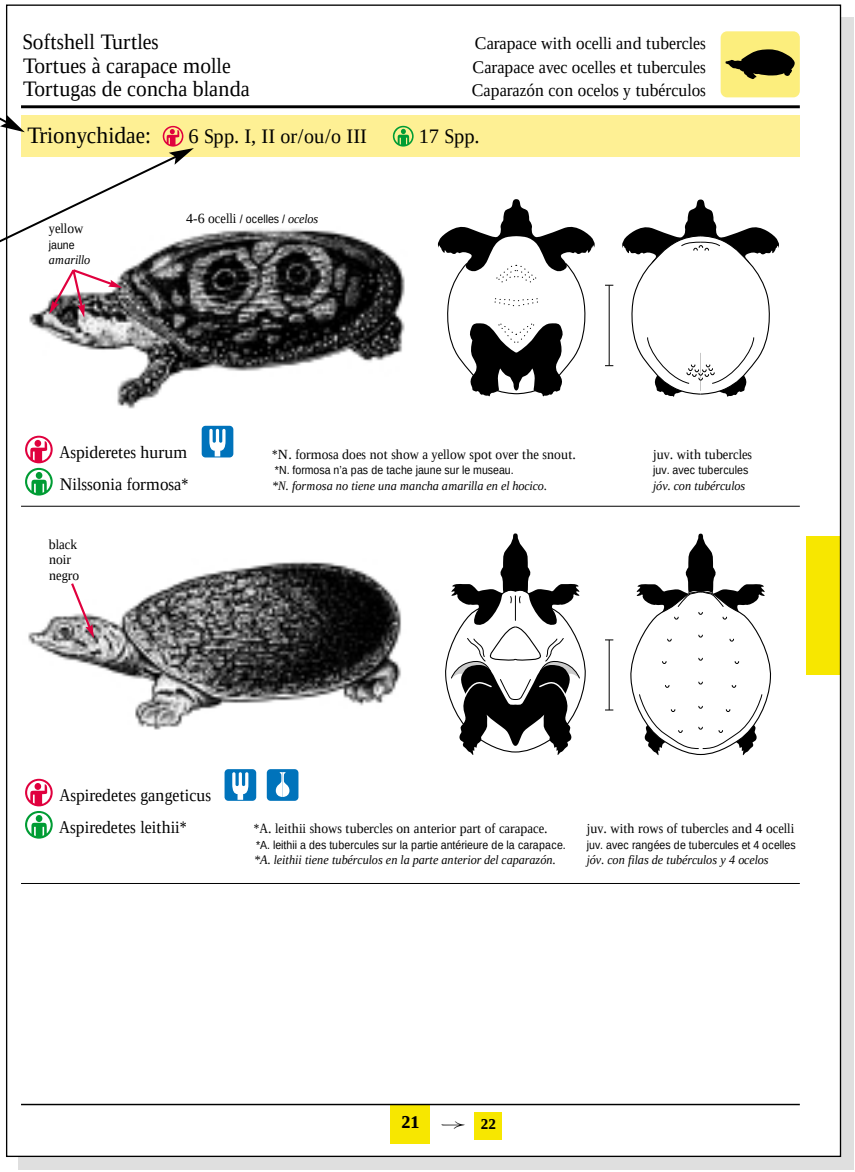
What does the family presentation bar describe?

When certain species, including several genera (smaller groups of species), share a number of common characteristics, scientists classify them as closely related, making them a family.

For each turtle family described in the blue or yellow sections, the scientific family name is highlighted in a coloured presentation bar, followed by the number of species protected under CITES for each Appendix and the number of species not protected under CITES. The more species in a family that are subject to CITES control, the more attention will be required. All numerical data is taken from the CITES Control List which came into force in 1997. Because modifications may have been made at the CITES biennial conferences, treat all values as approximate.

Scientific family name

Text indicating that 6 species in Appendix I, II or III are subject to a CITES control and that 17 species are not protected under CITES



NOTE: the abbreviation “Spp.” designates several species, “Sp.” a single species, “Ssp.” a single subspecies, “Sspp.” several subspecies and “Spp., ...” indicates other genus are included in this taxon.

E ?

What is the purpose of the orange section?

The orange section lists the species illustrated in the blue and yellow sections that must be referred to an expert for identification, and all turtle species which are not illustrated in the guide.

What is in Index A?

Index A provides the **Scientific and English, French and Spanish corresponding common names** of the species illustrated in the guide. They are presented in alphabetical order of the scientific names. A different typeface is used for each language.

INDEX A

Scientific Names Noms scientifiques Nombres científicos	English Anglais Inglés	French Français Francés	Spanish Espagnol Español
Acanthochelys pallidipectoris	**Chaco Side-necked Turtle**	Platémyde à éperons	*Tortuga cuellilarga del Chaco*
Acanthochelys radiolata	**Brazilian Radiolated Swamp Turtle**	Platémyde radiolée	*Tortuga brasileña de pantano*
Acanthochelys spixii	**Spiny-neck Turtle**	Platémyde de Spix	*Tortuga negra de cuello espinoso*
Amyda cartilaginea	**Asiatic Softshell Turtle**	Trionyx cartilagineux	*Tortuga asiatica de concha blanda*
Annamemys annamensis	**Annam Leaf Turtle**	Emyde de l'Annam	
Apalone ferox	**Florida Softshell Turtle**	Trionyx de Floride	*Tortuga de concha blanda de Florida*
Apalone mutica	**Smooth Softshell Turtle**	Trionyx mutique	*Tortuga lisa de concha blanda*
Apalone spinifera ater	**Black Spiny Softshell Turtle**	Trionyx épineux noir	*Tortuga blanca*
Apalone spinifera spinifera	**Eastern Spiny Softshell Turtle**	Trionyx épineux de l'Est	*Tortuga de concha blanda*
Aspideretes gangeticus	**Indian Softshell Turtle**	Trionyx du Gange	*Galápago conchiblando del Ganges*
Aspideretes hurum	**Indian Peacock Softshell Turtle**	Trionyx à ocelles	*Galápago conchiblando ocelado*
Aspiredetes leithii	**Leith's Softshell Turtle**	Trionyx de Leith	
Aspideretes nigricans	**Black Softshell Turtle**	Trionyx noirâtre	*Galápago conchiblando oscuro*
Batagur baska	**Batagur**	Batagur malais	*Galápago batagur*
Callagur borneoensis	**Painted Terrapin**	Emyde peinte de Bornéo	
Caretta caretta	**Loggerhead**	Caouanne	*Cayuma*
Carettochelys insculpta	**Pig-nose Turtle**	Carettochélyde d'Australasie	*Tortuga de nariz de puerco*
Chelonia agassizii	**Pacific Green Turtle**	Chélonée franche du Pacifique	*Tortuga franca oriental*

The names of species are taken from:

John B. Iverson, Earlham College. 1992. *A Revised Checklist with Distribution Maps of the Turtles of the World* Privately Printed. Richmond, Indiana, USA;

World Conservation Monitoring Centre. 1996. *Checklist of CITES Species. Lista de las especies CITES. Liste des espèces CITES.* First edition. Cambridge, UK;

Patrick David. 1994. *Liste des reptiles actuels du monde I. Chelonii*. Dumerilia, Vol. 1, Laboratoire des Reptiles et Amphibiens, Muséum national d'Histoire naturelle, Paris, France;

and from

Dr. Gustavo Aguirre, Instituto de Ecología, A.C., Universidad Nacional Autónoma de México.

E ?

What is in Index B?

Index B provides an alphabetical list of the scientific and commons names of the species illustrated in the guide, as well as their status, family and the pages to consult.

Alphabetical list including:
- the names of the species illustrated in the guide (Index A);
- the common names most frequently used in international trade for all species mentioned.

INDEX B/ INDEX B/ ÍNDICE B

Names Noms Nombres	Scientific Names Noms scientifiques Nombres científicos	Status, family Situation, famille Status, familia	Blue Bleue Azul	Yellow Jaune Amarilla	Orange Orange Naranja
Abingdon Island Tortoise	Geochelone nigra abingdonii	C, TE		2*	
Acanthochelys pallidipectoris	Acanthochelys pallidipectoris	N.C, CI		26	
Acanthochelys radiolata	Acanthochelys radiolata	N.C, CI		26	
Acanthochelys spixii	Acanthochelys spixii	N.C, CI		26	
Acanthochelys Spp.	Acanthochelys Spp.	N.C, Cl		26	
Acinisside	Pyxis planicauda	C, TE		18	
Acinixys planicauda	Pyxis planicauda	C, TE		18	
Adanson's Mud Turtle	Pelusios adansonii	C, PE-1		30*	1
Aegyptische Landschildkröte	Testudo kleinmanni	C, TE		17	
Afghan Tortoise	Testudo horsfieldii	C, TE		17	
African Black Terrapin	Pelusios niger	C, PE-10		30*	1
African bungoma	Cyclanorbis senegalensis	N.C, TR	7		
African Dwarf Mud Turtle	Pelusios nanus	N.C, PE-9		30*	1
African Flap-shell Turtle(s)	Cyclanorbis Spp.	N.C, TR	7		
African Forest Tortoise(s)	Kinixys Spp.	C, TE	5		
African Forest Turtle	Pelusios gabonensis	C, PE-8		30*	1
African Helmeted Turtle	Pelomedusa subrufa	C, PE		30	
African Hinged Terrapin(s)	Pelusios Spp.	N.C-C, PE		30	1
African Keeled Mud Turtle	Pelusios carinatus	N.C, PE-4		30*	1
African Mud Turtle	Pelusios castaneus	C, PE-5		30	1
African Mud Turtle	Pelusios subniger	C, PE-14		30*	1

N.C Species not regulated by CITES

C Species protected under CITES (Control List which came into effect in 1997)

PE-14 Abbrevation of the family name (Pelomedusidae) followed by a species number. This species is illustrated in the yellow section and must be referred to an expert for identification.

Consult page **30** for an illustration

***** Indicates this turtle is not illustrated at the species or subspecies level

Note:
Eretmochelys imbricata bissa
genus species subspecies

Symbols.


Trade regulated by CITES


Trade not regulated by CITES


Detain and refer to an expert


Important detail for identification


Important detail for identification on underside

"How to use this guide" section


Key pages


Section of turtles most easily identified

Section of turtles requiring closer observation


List of species to refer to an expert

Index A - scientific names and common names of illustrated species

Index B - scientific and common names of illustrated species and pages to consult


Food products


Leather goods


Carapace


Eggs


Jewelry

Various products


Oil


Unique feature


black line = 30 cm (1 ft.)

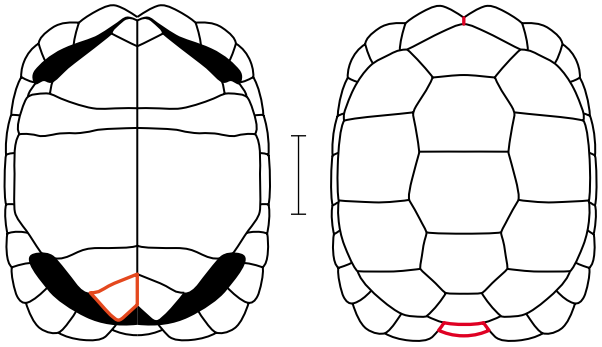

blue line = 5 cm (2 in.)

E ?

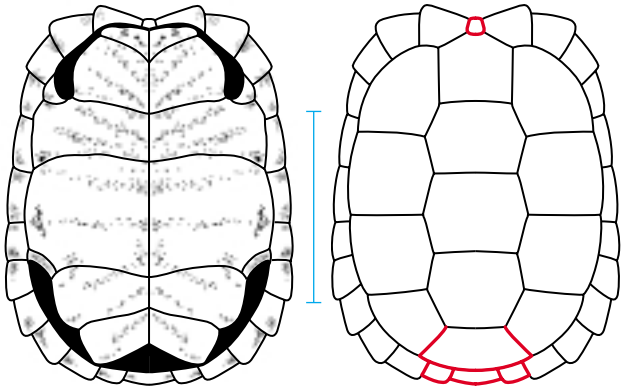
Size.

To determine the size of the specimen, use the black (30 cm, or 1 foot) and blue (5 cm, or 2 inches) scales next to the plastron and carapace views of the turtle. If the black scale appears beside the illustrations, place a 30 cm (1 foot) ruler near the specimen. If the blue scale is used, place a 5 cm (2 inch) ruler near the specimen. The proportions between the specimen and the ruler should correspond to those in the illustration.

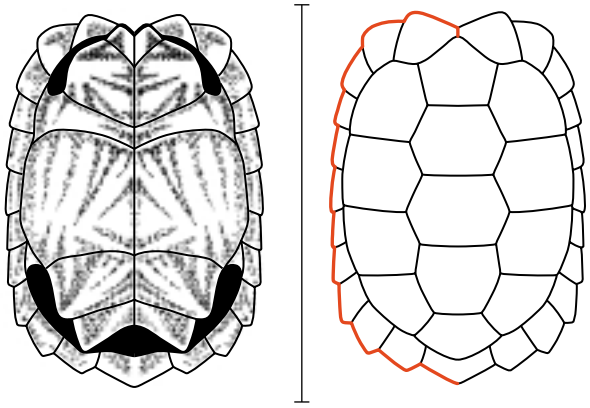
For example;



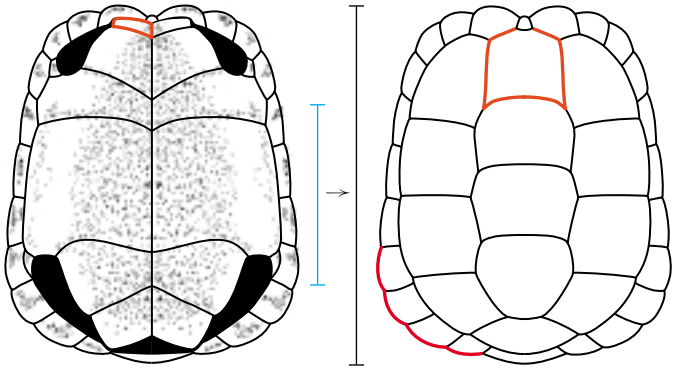
Geochelone nigra
approximately 130 cm (4.2 ft.)



Homopus signatus
approximately 10 cm (4 in.)



Geochelone elegans
approximately 28 cm (11 in.)



Homopus areolatus,
from approximately 10 cm (4 in.) to
approximately 30 cm (1 ft.)

In all cases, the scale indicates approximate size. It should not be interpreted as a precise measurement.