



Wild Lands, Plants and Animals: NATURE'S PHARMACY, OUR TREASURE CHEST



WILD SPECIES PROVIDE MEDICINES WE DEPEND ON

🌿 **56% of the 150 most popular prescribed drugs** are derived from compounds found in the wild, with an annual economic value of **\$80 billion**.

- 🌿 Nearly **1/4 of prescriptions** written in the U.S. are derived from wild species.
- 🌿 At least 13% of flowering plants – **53,000 species globally** – are used medicinally.
 - 🌿 **BUT** - less than one percent (1%) of tropical plant species have been screened for pharmaceutical applications.
 - 🌿 **SO** - At current extinction rates, **experts estimate that we lose one major drug source every 2 years**. Cures for cancer or AIDS may be waiting to be discovered in an imperiled plant or animal.



EXAMPLES

- 🌿 The bark of the **Pacific Yew**, a tree found in the ancient forests of the Pacific Northwest, contains the substance marketed as Taxol®—approved for treatment of ovarian, breast, and lung cancer.
- 🌿 **Quinine**, used to prevent malaria, is derived from the bark of the Cincona tree, native to South America.
- 🌿 **The Rosy Periwinkle provides the cure for Hodgkin's disease and some forms of leukemia**. This plant was on the brink of extinction from deforestation in its native Madagascar until scientists discovered its medicinal value.
- 🌿 **Digitalis**, derived from Purple Foxglove, extends the life span of an estimated **3**

million Americans who suffer from heart disease.

- 🌿 **Star Anise**, a Chinese herb long used to treat infants for colic, provides a key ingredient in the anti-viral drug Tamiflu®. The plant is thus at the **center of the worldwide search for a cure for avian flu and the threatened global flu pandemic**.

- 🌿 Microorganisms are the source of more than 3,000 antibiotics including **penicillin**, produced by the fungus *Penicillium*



- 🌿 Native forests in Belize are estimated to be worth between **\$726 and \$3327/hectare for their medicinal plants alone**.

- 🌿 Rooibos, a member of the pea family from South Africa, is a concentrated source of antioxidants.

- 🌿 **Aspirin**, also known as acetylsalicylic acid, comes from the bark of the willow tree.
- 🌿 Devil's Club, native to Pacific Northwest old growth forests, is used to treat a range of problems from **arthritis to indigestion**. It is **particularly useful against infections and diabetes**.



ANIMALS HELP TOO!

- 🌿 Tests in Australia have shown that **Crocodile blood may contain compounds that kill the HIV virus**.
- 🌿 **Gila Monster saliva helps diabetics**. The drug Byetta®, recently given U.S. approval for treatment of diabetes, is made from Gila Monster saliva. The drug can control blood sugar for longer periods than older diabetes drugs, and helps with weight loss.

Native Plant Conservation Campaign – A Project of the Center for Biological Diversity

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