



## The Tasmanian Devil (Part 2)

By Jutta Siefert Dudley

By this time of the year (January-February) young Tasmanian devils have become independent of their mothers and are now on their own. They are securing hideaways to call home in hollow logs, wombat burrows, or the foundations of old homes and barns. Once they find a few places that are safe to sleep or raise young in, they may keep these for life and move between them. Devils keep their dens clean, constantly clearing out and replenishing the leafy nesting materials. They may leave the den to bask in the sun but after dusk and before dawn, the devils are on the move. They will hunt small prey and scavenge for carrion along set trails in their home range (~20 square miles), which is shared with other devils. While on the trail, the devil may add to the scats collecting in a communal latrine or join in a rowdy tug of war with a group of devils at the carcass of a wallaby.

Devils are currently the top predator in Tasmania since the thylacine was exterminated. It is their expertise at scavenging rather than hunting that plays an important part in the ecosystem. This was not a recognized benefit among European settlers who believed this fearsome

acting animal would kill their farm stock. A bounty placed in the 1930s almost finished off the population. But protection was gained in 1941 and the devils began a comeback. By the 1990s the number of devils was high and threats to their population came mainly through habitat destruction and collision with vehicles (eating roadkill is risky business!).

*A healthy devil exhibits the classic "yawn" posture of low level stress.*



photo credit: Save the Tasmanian Devil

The celebratory improvement in population was not long lived. Another threat suddenly appeared in 1996 when some wild devils in the NE section of Tasmania were photographed with facial tumors. The condition was later identified as a unique cancer and called Devil Facial Tumor Disease (DFTD). It's restricted to devils, is fatal, and there is no known

cure. Since its first appearance the population of devils has plummeted and once again, extinction in the wild is likely.

Research indicates DFTD began as a mutation in a female devil, is of nerve cell origin, and is spread when cancerous cells are picked up by a devil biting into the diseased flesh of another devil. The cancer cells are not recognized as invaders by the devil immune system. The cancer grows into bumps inside and outside the mouth and neck, turning into larger lesions. Stricken animals cannot eat properly and die of starvation.

Devils in afflicted areas are doomed to live shortened lives (a normal life is 5 years). In response, their behavior has reportedly changed. Females are now giving birth at age one year rather than age two and live through only one breeding cycle rather than three.

Sightings of devils have dropped 95% in places where observations have been conducted for a number of years, especially in the NE. Elsewhere sighting reductions vary 70% to 84%. The disease continues to spread southwesterly across the state with no apparent abatement. About a quarter of the island is left to be affected.

*Continued on page 2*

To stem the tide of extinction, the Australian and Tasmanian governments, with enthusiastic support from universities, conservation organizations, wildlife parks, and citizens, initiated the Save the Tasmanian Devil Program (<http://www.tassiedevil.com.au/tasdevil.nsf>). The program is ambitious; it includes collecting field data, disease analysis, maintaining an Insurance Population, and translocating

healthy animals to disease isolated areas.

The insurance population (IP) has been established with an initial core of 500 healthy devils whose progeny will someday repopulate Tasmania. Until then, groups of the IP live at various protected captive and free range facilities.

Maintaining wild behavior is desirable, so special effort is being made to translocate some

devils to large expanses of suitable landscapes that are safe.

An example of such a large scale project is taking place on Maria Island, a national park off the east coast. Last November, fifteen carefully selected devils were released here to begin life in the wild.

The ultimate fate of *Sarcophilusharrisii* is unknown. Let's hope there will be a "g' day" in the species' future!

**Don't miss out on RAS events in 2013!**  
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# EVENTS for February, 2013

For updates to events, check the Academy website, <http://www.rasny.org>, and Section websites.

## **Fri 1 ASTRONOMY SECTION**

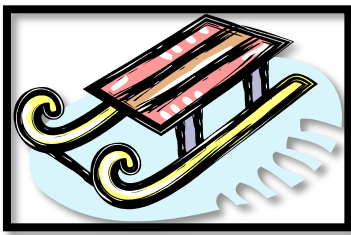
7:30 p.m. RIT, Gosnell Hall, Room A300. General Meeting. Main talk: "Observing Run at Kitt Peak" by Valerie Rapson. Short talk: "Constellations/solar observatory" by Bob McGovern.

## **Fri 8 ASTRONOMY SECTION**

7 p.m. RIT Gosnell Hall, Room A300. Winter Education Series. Dr. Michael Richmond will give a talk on "Astro Jargon."

## **Sun 10 ASTRONOMY SECTION**

12 – 4 p.m. Farash Center, 8355 County Rd 14, Ionia. Sledding party (will reschedule to Sun 17 if there is no snow on the 10<sup>th</sup>). Contact Bob at (585) 315-1850.



## **Sat 16 ASTRONOMY SECTION**

1-5 p.m. Farash Center, 8355 County Rd 14, Ionia. Open House and solar observing. Evening observing if weather permits. A great opportunity to tour this wonderful facility. For more information contact

## **Sat 16 LIFE SCIENCES SECTION**

10 a.m. - 2 p.m. RAS Herbarium, located in the basement of the Rochester Museum and Science Center (RMSC). Workshop on re-mounting and repairing specimens. No experience needed – instruction will be provided! If you plan to attend, please send an RSVP to Elizabeth Pixley. At RMSC, go to the front desk and ask staff person there to call ext. 368, the phone in the Herbarium. For more information, contact Elizabeth Pixley, herbarium curator (585) 334-0977 or [epixley@rochester.rr.com](mailto:epixley@rochester.rr.com).

## **Tues 19 MINERAL SECTION**

7 p.m.– 9 p.m. Brighton Town Hall, Downstairs Meeting Room, 2300 Elmwood Ave., Rochester. Monthly Meeting. Richard Batt, Ph.D., Associate Professor, Earth Sciences & Science Education Dept., Buffalo State College, will speak on "Geology of Iceland." Door prizes and refreshments. Visitors welcome. For more info, contact [mineralvp@rasny.org](mailto:mineralvp@rasny.org) or Stephen at (585) 288-5683

**Wed 20 RAS BOD MEETING**  
7 p.m. Brighton Town Hall. Stage Conference Room.

## **Sat 23 LIFE SCIENCES SECTION**

3 p.m. Mendon Ponds Park, meet at the Visitors Center. Winter Tree ID Field Trip. Ken Wolf will show us the beautiful and amazing characteristics of Tree ID in the winter. Please call Karen Wolf (585) 670-9709 for more details. The time might change.



## **ONGOING- ASTRONOMY**

ASRAS will operate the telescope, or one on the sidewalk, at Strasenburgh Planetarium on mostly clear Saturday nights. Contact Jim at (585) 703-9876.

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For applications and/or more information, contact Jutta Dudley, 140 Railroad Mills Road, Pittsford, NY 14534; by telephone (585) 385-2368; or by e-mail <pres@rasny.org>.

The **Academy** Internet website is <http://www.rasny.org>

This “**BULLETIN**” is produced monthly, *except July and September*, by the **Astronomy Section, Rochester Academy of Science**. Submissions are due by the 10<sup>th</sup> of the month, and may be emailed to editor@rasny.org

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