

The 2006 CANADIAN UFO SURVEY: An Analysis of UFO Reports in Canada

Compiled by
Geoff Dittman
and
Chris A. Rutkowski
Contributors:

Errol Bruce-Knapp, MUFON Ontario and UFO Updates
Barb Campbell, Saskatchewan Provincial Paranormal
Research Centre, Inc.

Peter Davenport, NUFORC
George Filer, Filer's Files
Don Ledger
Dave Pengilly, UFO*BC
Joe Trainor, UFO Roundup
Brian Vike, HBCCUFO

Editor

Chris Rutkowski, UFOROM

Data Entry, Compilation and Analyses

Geoff Dittman, UFOROM

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The 2006 Canadian UFO Survey

Overview

Since 1989, UFOROM has been soliciting UFO case data from all known and active investigators and researchers in Canada. Our goal has been to provide data for use by researchers as they try to understand this controversial phenomenon. No comparable studies are currently produced by any other research group in North America. Similar programs exist in Sweden, where UFO report data is analysed by the Archives for UFO

Research, and in Italy by Centro Italiano Studi Ufologici.

2006 marks the seventeenth year of collecting and analysing Canadian UFO report data. UFOROM presently has UFO data from 1993 to the present available online, and is working to add earlier national case data to the database.

The 2006 Canadian UFO Survey: Summary of Results

- There were 736 UFO sightings reported in Canada in 2006 or two each day.
- An additional 96 reports of fireballs were reported to astronomers but were not included in this year's analysis. If these were added to the rest of the data, they would raise the number of UFO reports in Canada in 2006 to 832, an increase of eight per cent over the 769 cases in 2005.
- The cumulative average of UFO reports per year in Canada increased from 354 in 2005 to 376 in 2006, a value which has been rising since 1998, when it was only 194 reports per year.
- Saskatchewan, Nova Scotia and Nunavut all had all-time record high numbers of UFOs reported in 2006.
- In 2006, about 12 per cent of all UFO reports were unexplained. This
 percentage of unknowns falls to less than one per cent when only higherquality cases are considered.
- Most UFO sightings have two witnesses.
- The typical UFO sighting lasted approximately 27 minutes in 2006.

The most important findings of this study include the fact that the yearly number of reported UFO sightings in Canada remains high, and 2006 saw the third-highest number of sightings ever recorded.

People continue to report observing unusual objects in the sky, and some of these objects do not have obvious explanations. Many witnesses are pilots, police and other individuals with reasonably good observing capabilities and good judgement. Although most reported UFOs are simply lights in the night sky, a significant number are objects with definite shapes observed within the witnesses' frame of reference.

Popular opinion to the contrary, there is yet to be any incontrovertible evidence that some UFO cases involve extraterrestrial contact. The continued reporting of UFOs by the public and the yearly increase in numbers of UFO reports suggests a need for further examination of the phenomenon by social, medical and/or physical scientists.

For further information, contact:

Ufology Research of Manitoba,

e-mail: canadianuforeport@hotmail.com

Raison D' etre

Why bother to collect UFO reports? In one sense, the answer may be as simple as because they' re there. Polls by both professional and lay organizations have shown that approximately ten per cent of all North Americans believe they have seen UFOs. Given the population data available, this implies a very large number of UFO reports. If UFOs are trivial and non-existent, as some claim, then one might ask why such a large percentage of the population is labouring under the delusion of seeing things that are not there. If, on the other hand, UFOs represent a A real@ phenomenon, the data should be examined for insight into its nature. In either situation, it can be argued that UFO reports deserve and merit serious scientific attention.

In general, the public equates UFOs with alien visitation. However, there is no incontrovertible proof that this is a real connection. In order to determine if there might be signs of extraterrestrial contact, research on the actual characteristics of UFO reports is needed. Do the reports really bear out such a linkage? What, exactly, are people seeing and reporting as UFOs? Are they seeing "classic" Hollywood-style flying saucers, like those portrayed in movies and television shows? Are there really well-documented and well-witnessed UFO reports, with no explanation as to their nature? Given the general public perception that aliens exist and are present in our Solar System, and that the answers to these questions may already exist in the beliefs and desires of popular culture, a thorough examination of actual UFO reports would go far to provide necessary insight into the phenomenon.

What is generally overlooked by most writers and readers on this subject is that UFO reports are the foundation of ufology (the study of the UFO phenomenon). While this may seem an obvious fact, many books on UFOs and related subjects proceed on the basis of assumptions, theories and individual anecdotal accounts. Many books about UFO abductions on bookstore shelves give the impression that this aspect of the UFO phenomenon constitutes most of ufology. This is certainly not the case; UFO research begins with the investigation of UFO reports. It is through later collection and study that researchers can theorise about the phenomenon and eventually write papers and books speculating about UFO origins (including the possible evidence of alien contact.)

Abduction cases actually comprise a very tiny fraction of the bulk of UFO data. The "bread and butter" of UFO research lies not in fanciful discourses about aliens' genetic manipulation of humans but in what UFO witnesses are actually seeing and reporting.

This last point cannot be overemphasized. The UFO reports collected and analysed in our annual Surveys are the only data upon which studies of Canadian UFOs can be reasonably based. As UFOs are a worldwide phenomenon, the results of analyses of Canadian UFO reports can easily be applied to cases in other countries. In effect, this is the empirical data for research in this field. If one wants to know what people really are seeing in the skies, the answer lies within these reports.

The General Collection of UFO Data

Many individuals, associations, clubs and groups claim to investigate UFO reports. Many solicit reports from the general public. Comparatively few actually participate in any kind of information sharing or data gathering for scientific programs. Some are primarily interest groups based in museums, planetariums, church basements or individuals' homes, and do essentially *nothing* with the sighting reports they receive. (It should be noted that some of these groups do actively participate in data collection and research projects, several of which are noted in the list of contributors at the beginning of this document.) And, in recent years, several websites have been developed for the public to report UFO sightings.

Because there is no way to enforce standards in UFO report investigations, the quality of case investigations varies considerably between groups and across provinces. Quantitative studies are difficult because subjective evaluations and differences in investigative techniques do not allow precise comparisons. UFOROM's requests for data from Canadian UFO researchers and investigators, and our transcribing of information from others' websites, unfortunately allows input of only basic information that can be used in rigourous analyses. Most Internet postings of UFO report information are incomplete and do not show any actual case investigation results, often forcing an evaluation of Insufficient Information. Case data which can be obtained usually includes things such as date of the sighting, the time, duration, number of witnesses and their location $\mathbb C$ facts which are not subjective and can be used in scientific studies before interpretation.

The Official Collection of UFO Data

Until 1995, the National Research Council of Canada (NRC) routinely collected UFO reports from private citizens, RCMP, civic police and military personnel. This collection of data was in support of the NRC's interest in the retrieval of meteorites, with the idea that witnesses' reports of bright lights in the sky were mostly fireballs and meteors which could then be triangulated to locate fallen meteorites.

This practice ceased as a result of budgetary restrictions, lowered prioritization of meteoric research and the perceived reduction in importance of UFO data. However, included among the NRC reports were many observations of meteors and fireballs, and these have been added into the UFOROM database since 1989. For several years, the collection of such reports was in an effective hiatus, but in 2000, an arrangement facilitated that UFO sightings reported to Transport Canada could then be referred to UFOROM for research into the phenomenon. This does not mean that UFOROM receives all official government or military UFO reports. UFO sightings reported to the RCMP, for example, will normally get sent only to RCMP Divisional Headquurters.

Another reason why UFO data should be collected and studied is found in official

directives of the Department of National Defence regarding the actions of all pilots in Canadian airspace. In documents relating to CIRVIS (Communications Instructions for Reporting Vital Intelligence Sightings), both civilians and military personnel are instructed that:

CIRVIS reports should be made immediately upon a vital intelligence sighting of any airborne, waterborne and ground objects or activities which appear to be hostile, suspicious, unidentified or engaged in illegal smuggling activity.

Examples of events requiring CIRVIS reports are:

- unidentified flying objects;
- submarines or warships which are not Canadian or American;
- violent explosions; and
 - unexplained or unusual activity in Polar regions, abandoned airstrips or other remote, sparsely populated areas.

[DND Flight Information Publication - GPH 204. Flight Planning and Procedures, Canada and North Atlantic, Issue No. 57, Effective 0901Z 20 May 1999]

In other words, it is considered in the best interests of everyone to report UFO sightings, and certainly of interest to the Department of National Defence. The annual Canadian UFO Survey looks critically at UFO sightings and assesses their nature.

For the purposes of this and other scientific studies of UFO data, UFO sightings which have been made to recognized contributing and participating groups, associations, organizations or individuals are considered *officially* reported and valid as data in this study. The collection of Canadian UFO data is challenging. However, the data obtained for analysis yields results that can be compared with other studies. This is useful in understanding the nature of UFO reports not only in Canada, but can shed light on the nature of UFO reports elsewhere in the world.

UFO Reports in Canada

The following table shows the number of reported UFOs per year since 1989.

| Year | Number | Average |
|-------|--------|---------|
| 1989 | 141 | 141.0 |
| 1990 | 194 | 167.5 |
| 1991 | 165 | 166.7 |
| 1992 | 223 | 180.8 |
| 1993 | 489 | 242.4 |
| 1994 | 189 | 233.5 |
| 1995 | 183 | 226.3 |
| 1996 | 258 | 230.3 |
| 1997 | 284 | 236.2 |
| 1998 | 194 | 232.0 |
| 1999 | 259 | 234.5 |
| 2000 | 263 | 236.8 |
| 2001 | 374 | 247.4 |
| 2002 | 483 | 264.2 |
| 2003 | 673 | 291.5 |
| 2004 | 882 | 328.4 |
| 2005 | 769 | 354.3 |
| 2006 | 738 | 375.8 |
| Total | 6761 | |

The number of UFO reports per year has varied annually, depending on a number of factors. However, yearly totals generally increased to a peak in 2004 and have remained at a plateau. The average number of UFO reports in Canada per year has been increasing since 1998. This clearly contradicts comments by those who would assert that UFOs are a passing fad or that the number of UFO sightings is decreasing.

UFOs and IFOs

For this study, the working definition of a UFO is an object seen in the sky which its observer cannot identify.

Studies of UFO data routinely include reports of meteors, fireballs and other conventional objects. In many instances, observers fail to recognize stars, aircraft and bolides, and therefore report them as UFOs. Witnesses often report watching stationary flashing lights low on the horizon for hours and never conclude they are observing a star or planet.

Some UFO investigators spend many hours sorting IFOs from UFOs. Historically, analyses of UFO data such as the American projects Grudge, Sign and Blue Book all included raw UFO data which later were resolved into categories of UFOs and IFOs. Sometimes, observed objects are quickly assigned a particular IFO explanation even though later investigation suggests such an explanation was unwarranted. The reverse is also true.

The issue of including IFOs in studies of UFO data is an important one. One could argue that once a sighting is explained, it has no reason to be considered as a UFO report. However, this overlooks the fact that the IFO was originally reported as a UFO and is indeed valid data. It may not be evidence of extraterrestrial visitation, but as UFO data, it is quite useful. It must be remembered that all major previous studies of UFOs examined UFO reports with the intent to explain a certain percentage of cases. These cases were the IFOs $\[Carcellong]$ definitely part of the UFO report legacy.

IFOs are problematic in that they are not interesting to most ufologists. In fact, some UFO investigators readily admit they do not record details about UFO reports that seem easily explained as ordinary objects. This may be a serious error. The UFO witness may be conscientiously reporting an object that is mysterious to him or her \circ the exact definition of a UFO. Therefore, even late-night, anonymous telephone calls that are obviously reports of airplanes or planets should be rightly logged as UFO reports. It seems reasonable that all UFO reports be included in statistical databases and in later studies on the phenomenon, regardless of the cases' later reclassification as IFOs.

Since 1989, UFOROM has been including astronomers' reports of fireballs in the annual data analyses. This has been a matter of some debate within ufology, as fireballs, by definition, are IFOs and not UFOs. Furthermore, if reported by astronomers, they are considered to have definitive explanations. Including these reports as UFO data is consistent with the inclusion of such cases in Blue Book statistics, which had many fireballs added as UFO data, even though the reports were sometimes made by astronomers themselves.

The advantage of including astronomer-reported fireballs as UFO data is that fireballs reported by the lay public are labelled UFOs, and this can allow comparison between data from both groups. Often, astronomers detect and report fireballs the same date and time as those reported as UFOs by the public, and can greatly assist in converting some UFOs to IFOs quickly. However, many obvious fireballs are reported by civilians

without astronomers' own observations. In addition, some fireballs reported as IFOs by astronomers have been investigated and found not to have explanations as fireballs at all. This confusion and inconsistency has encouraged the continued input of fireball IFO data as UFO data. For the 2006 Canadian UFO Survey, however, fireball cases from astronomical sources such as the Meteorites and Impacts Advisory Committee of the Canadian Space Agency (MIAC) and the American Meteor Society were not included. This has likely skewed some results in the analysis of UFO data.

Since most UFO reports can be explained and reclassified as IFOs, this fact attests to the reality of the objects seen. UFO reports actually reflect *real* events which occur. When a UFO is reported, a *real object* has been seen that was not just a fantasy of a witness' imagination.

Method

Data for each case was received by UFOROM from participating researchers across Canada. In addition, existing databases, web pages and other online sources of UFO sighting information were searched for Canadian reports that occurred in 2006. The information then was coded by members of UFOROM and entered into a Microsoft Excel database and statistically analysed.

An example of the coding key is as follows:

Example: 2006 01 09 1530 Vernon BC DD 900 silver 2 ps 6 5 UFOBC p four objs. seen

Field: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Field 1 is a default YEAR for the report.

Field 2 is the MONTH of the incident.

Field 3 is the DATE of the sighting.

Field 4 is the local TIME, on the 24-hour clock.

Field 5 is the geographical LOCATION of the incident.

Field 6 is the PROVINCE where the sighting occurred.

Field 7 is the TYPE of report, using the Modified Hynek Classification System.

Field 8 is the DURATION of the sighting, in seconds (a value of 600 thus represents 10 minutes).

Field 9 is the primary COLOUR of the object(s) seen

Field 10 is the number of WITNESSES

Field 11 is the SHAPE of the object(s) seen

Field 12 is the STRANGENESS of the report.

Field 13 is the RELIABILITY of the report.

Field 14 is the SOURCE of the report.

Field 15 is the EVALUATION of the case.

Field 16 includes any COMMENTS noted about the case.

Analyses of the Data

Distribution of UFO Reports Across Canada

In 2006, British Columbia had more than 28 per cent of the total number of UFO sightings reported in Canada, down from a record peak of 45 per cent in 2003, but still a substantial over-representation based on population alone. Ontario and Quebec together constitute more than 60 per cent of Canada's population, but had only 35 per cent of the total number of UFO reports in 2006. Only 43 cases were reported east of Quebec in 2006. This past year, the numbers of UFO reports in Saskatchewan, Nova Scotia and Nunavut were the highest ever recorded.

(continued on next page)

TABLE 1
Distribution of UFO Reports by Province

| | NT | NU | YT | BC | AB | SK | MB | ON | PQ | NB | NS | PI | NF |
|------|----|----|-----|------|-----|-----|-----|------|-----|-----|-----|----|----|
| 1989 | 1 | 0 | 0 | 15 | 16 | 18 | 22 | 34 | 28 | 1 | 3 | 0 | 3 |
| 1990 | 2 | 0 | 1 | 76 | 9 | 10 | 20 | 21 | 36 | 7 | 5 | 3 | 4 |
| 1991 | 0 | 0 | 1 | 59 | 22 | 7 | 6 | 30 | 16 | 9 | 7 | 1 | 4 |
| 1992 | 1 | 0 | 3 | 90 | 8 | 9 | 23 | 56 | 10 | 9 | 3 | 0 | 4 |
| 1993 | 5 | 0 | 0 | 157 | 56 | 93 | 74 | 51 | 32 | 3 | 3 | 1 | 7 |
| 1994 | 3 | 0 | 3 | 14 | 39 | 8 | 10 | 51 | 34 | 6 | 9 | 0 | 6 |
| 1995 | 4 | 0 | 0 | 45 | 10 | 11 | 48 | 41 | 20 | 0 | 1 | 0 | 1 |
| 1996 | 35 | 0 | 0 | 43 | 10 | 11 | 39 | 63 | 45 | 1 | 9 | 0 | 1 |
| 1997 | 22 | 0 | 8 | 99 | 11 | 5 | 32 | 72 | 24 | 1 | 6 | 1 | 3 |
| 1998 | 2 | 0 | 22 | 58 | 6 | 14 | 15 | 59 | 15 | 1 | 0 | 1 | 0 |
| 1999 | 0 | 0 | 20 | 118 | 19 | 1 | 6 | 79 | 8 | 1 | 0 | 1 | 6 |
| 2000 | 0 | 0 | 26 | 102 | 17 | 8 | 19 | 53 | 22 | 0 | 15 | 0 | 0 |
| 2001 | 1 | 5 | 18 | 123 | 40 | 12 | 20 | 87 | 34 | 5 | 21 | 2 | 6 |
| 2002 | 0 | 2 | 20 | 176 | 51 | 6 | 36 | 128 | 34 | 4 | 23 | 0 | 3 |
| 2003 | 2 | 1 | 16 | 304 | 76 | 19 | 25 | 150 | 49 | 4 | 21 | 2 | 4 |
| 2004 | 3 | 1 | 2 | 247 | 99 | 45 | 112 | 254 | 64 | 21 | 23 | 2 | 9 |
| 2005 | 1 | 0 | 3 | 209 | 90 | 77 | 43 | 214 | 77 | 15 | 16 | 4 | 12 |
| 2006 | 2 | 8 | 1 | 209 | 55 | 98 | 54 | 188 | 76 | 12 | 25 | 1 | 5 |
| | NT | NU | YT | BC | AB | SK | MB | ON | PQ | NB | NS | PI | NF |
| | 84 | 17 | 144 | 2144 | 634 | 452 | 604 | 1631 | 624 | 100 | 190 | 19 | 78 |

In addition, the geographical names of UFO sighting locations were examined for

trends. Many cities were found to have multiple reports, and these are noted in the following table. Large metropolitan areas include their suburbs.

Canadian Cities With Most UFO Reports in 2006

| Rank | City | Pro | vince | Number of Reports |
|-----------------------|--|-----|-------|----------------------|
| 1 | Maidstone | SK | | 51 |
| 2 | Montreal | PQ | | 24 |
| 3 | Winnipeg | ME | 3 | 23 |
| 4 | Aylmer | PQ | | 21 |
| 5 | Vancouver | ВС | | 17 |
| 6 | Terrace | ВС | | 16 |
| 7 | Hamilton | ON | | 13 |
| 8 | Edmonton | AB | | 12 |
| 8 | Ottawa | ON | ſ | 12 |
| 8 | Burnaby | ВС | | 12 |
| | | | | |
| Metropolitan Areas | | | | |
| Vancouver | (Incl.New Westminister, W. Van., N. Van., Burnaby, Surrey, Abbottsford, Port Coquitlam, Langley, N.Surrey, N.Langley, Richmond, Delta, N. Delta, Coquitlam, Port Moody) | | | 78 |
| Toronto | (Incl. Mississauga, Brampton, Scarborough, Oshawa, Whitby, Ajax, Pickering, Etobicoke, Newmarket, Richmond Hill, Markham, Oakville) | | | 39 |
| Ottawa | (Incl. Aylmer | | | 29 |
| Winnipeg | (incl. West and East St.Paul, Headingly, Bird's Hill, Lockport) | | | 24 |
| Montreal | | | | 24 |

Monthly Trends in UFO Reports

Monthly breakdowns of reports during each year tend to show slightly different patterns. For example, in 1999, UFO cases had no clear peaks in monthly report numbers, but the year 2003 saw a very significant set of peaks in July and August and troughs in May and June. UFO reports are generally thought to peak in summer and trough in winter, presumably due to the more pleasant observing conditions during the summer months, when more witnesses are outside. The summer peak was again evident in 2006 but there was no marked trough in the winter as in other years.

| | J | F | M | A | M | J | J | A | S | О | N | D |
|------|----|----|----|----|----|-----|-----|-----|----|-----|----|----|
| 1989 | 13 | 9 | 6 | 9 | 5 | 9 | 5 | 5 | 12 | 32 | 27 | 9 |
| 1990 | 17 | 7 | 6 | 47 | 10 | 10 | 9 | 47 | 15 | 16 | 10 | 0 |
| 1991 | 13 | 7 | 17 | 12 | 7 | 12 | 16 | 25 | 16 | 12 | 11 | 17 |
| 1992 | 15 | 16 | 27 | 16 | 22 | 16 | 23 | 19 | 11 | 16 | 21 | 21 |
| 1993 | 59 | 15 | 20 | 22 | 14 | 38 | 27 | 49 | 41 | 152 | 24 | 21 |
| 1994 | 16 | 12 | 15 | 21 | 15 | 37 | 19 | 8 | 15 | 10 | 7 | 13 |
| 1995 | 14 | 12 | 13 | 9 | 9 | 10 | 28 | 33 | 28 | 11 | 11 | 5 |
| 1996 | 37 | 18 | 20 | 16 | 8 | 20 | 30 | 32 | 10 | 22 | 30 | 11 |
| 1997 | 19 | 11 | 31 | 29 | 17 | 13 | 29 | 29 | 22 | 16 | 26 | 37 |
| 1998 | 3 | 4 | 8 | 5 | 9 | 13 | 16 | 40 | 45 | 35 | 7 | 4 |
| 1999 | 8 | 20 | 22 | 7 | 31 | 10 | 27 | 36 | 30 | 29 | 30 | 7 |
| 2000 | 21 | 17 | 15 | 21 | 12 | 11 | 19 | 46 | 20 | 44 | 15 | 19 |
| 2001 | 36 | 19 | 33 | 25 | 17 | 26 | 51 | 81 | 25 | 17 | 27 | 16 |
| 2002 | 31 | 54 | 41 | 28 | 36 | 44 | 73 | 74 | 42 | 26 | 19 | 14 |
| 2003 | 41 | 46 | 46 | 46 | 31 | 30 | 131 | 102 | 46 | 64 | 43 | 47 |
| 2004 | 59 | 53 | 72 | 68 | 82 | 97 | 96 | 113 | 83 | 46 | 56 | 53 |
| 2005 | 36 | 59 | 81 | 59 | 45 | 50 | 96 | 123 | 70 | 56 | 47 | 45 |
| 2006 | 33 | 43 | 41 | 66 | 65 | 108 | 113 | 113 | 61 | 36 | 20 | 29 |

| | J | F | M | A | M | J | J | A | S | О | N | D |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Totals | 471 | 422 | 514 | 506 | 435 | 554 | 808 | 975 | 592 | 640 | 431 | 368 |

UFO Report Types

An analysis by report type shows a similar breakdown to that found in previous years. The percentage of cases of a particular type remains roughly constant from year to year, with some variations. Nocturnal Lights (NLs) comprised more than 68 per cent of all cases in 2006. Daylight Disc reports made up only 11 per cent in 2006.

Less than 3 per cent of all reported UFO cases in 2006 were Close Encounters, emphasizing the reality that very, very few UFO cases involve anything other than distant objects seen in the sky. This is an important statistic, because the current popular interest in abductions and sensational UFO encounters is based not on the vast majority of UFO cases but on the very tiny fraction of cases which fall into the category of close encounters. The endless speculation of what aliens may or may not be doing in our airspace seems almost completely unconnected to what are actually being reported as UFOs.

(continued on next page)

TABLE 3

Report Types (Modified Hynek Classifications)

| | NL | ND | DD | C1 | C2 | C3 | C4 | EV | RD | РН |
|---------|------|------|-----|-----|----|----|----|----|----|----|
| 1989 | 84 | 20 | 16 | 10 | 7 | 0 | 2 | 2 | 0 | 0 |
| 1990 | 141 | 24 | 15 | 2 | 1 | 0 | 4 | 3 | 0 | 0 |
| 1991 | 110 | 26 | 13 | 7 | 4 | 1 | 2 | 0 | 1 | 1 |
| 1992 | 136 | 44 | 20 | 15 | 5 | 2 | 3 | 0 | 0 | 1 |
| 1993 | 372 | 77 | 26 | 8 | 2 | 1 | 1 | 1 | 0 | 0 |
| 1994/95 | 234 | 78 | 28 | 21 | 1 | 1 | 5 | 1 | 0 | 0 |
| 1996 | 170 | 40 | 27 | 8 | 3 | 4 | 1 | 2 | 0 | 0 |
| 1997 | 145 | 62 | 52 | 4 | 2 | 5 | 8 | 4 | 0 | 1 |
| 1998 | 115 | 23 | 25 | 6 | 1 | 0 | 0 | 19 | 0 | 3 |
| 1999 | 163 | 44 | 37 | 3 | 7 | 1 | 0 | 0 | 0 | 0 |
| 2000 | 179 | 31 | 26 | 4 | 2 | 2 | 0 | 0 | 0 | 3 |
| 2001 | 218 | 80 | 55 | 8 | 1 | 3 | 3 | 0 | 0 | 0 |
| 2002 | 293 | 94 | 76 | 8 | 5 | 0 | 1 | 0 | 0 | 2 |
| 2003 | 431 | 152 | 74 | 5 | 5 | 3 | 2 | 0 | 0 | 0 |
| 2004 | 520 | 203 | 136 | 7 | 6 | 2 | 3 | 0 | 0 | 3 |
| 2005 | 424 | 169 | 149 | 9 | 5 | 3 | 2 | 0 | 0 | 1 |
| 2006 | 508 | 65 | 85 | 12 | 1 | 4 | 1 | 0 | 0 | 21 |
| | NL | ND | DD | C1 | C2 | C3 | C4 | EV | RD | РН |
| Totals | 4243 | 1232 | 860 | 137 | 58 | 32 | 38 | 32 | 1 | 36 |

For those unfamiliar with the classifications, a summary follows:

- NL (Nocturnal Light) light source in night sky
- ND (Nocturnal Disc) light source in night sky that appears to have a definite shape
- DD (Daylight Disc) unknown object observed during daytime hours
- C1 (Close Encounter of the First Kind) ND or DD occurring within 200 metres of a witness
- C2 (Close Encounter of the Second Kind) C1 where physical effects left or noted
- C3 (Close Encounter of the Third Kind) C1 where figures/entities are encountered
- C4 (Close Encounter of the Fourth Kind) an alleged "abduction" or "contact" experience

Note: The category of **Nocturnal Disc** was created in the 1980s by UFOROM originally for differentiation of cases within its own report files, and has been adopted by many other groups worldwide.

Hourly Distribution

The hourly distribution of cases has usually followed a similar pattern every year, with a peak at 2300 hours local and a trough around 0900 hours local. Since most UFOs are nocturnal lights, most sightings will occur during the evening hours. Since the number of possible observers drops off sharply near midnight, we would expect the hourly rate of UFO reports would vary with two factors: potential observers and darkness.

(continued on next page)

| Time | Number | % |
|-------------|--------|--------|
| 12:00-12:59 | 12 | 1.90% |
| 13:00-13:59 | 8 | 1.26% |
| 14:00-14:59 | 10 | 1.58% |
| 15:00-15:59 | 9 | 1.42% |
| 16:00-16:59 | 15 | 2.37% |
| 17:00-17:59 | 21 | 3.32% |
| 18:00-18:59 | 18 | 2.84% |
| 19:00-19:59 | 30 | 4.74% |
| 20:00-20:59 | 43 | 6.79% |
| 21:00-21:59 | 48 | 7.58% |
| 22:00-22:59 | 108 | 17.06% |
| 23:00-23:59 | 126 | 19.91% |
| 00:00-00:59 | 31 | 4.90% |
| 01:00-01:59 | 37 | 5.85% |
| 02:00-02:59 | 27 | 4.27% |
| 03:00-03:59 | 15 | 2.37% |
| 04:00-04:59 | 23 | 3.63% |
| 05:00-05:59 | 11 | 1.74% |
| 06:00-06:59 | 19 | 3.00% |
| 07:00-07:59 | 8 | 1.26% |
| 08:00-08:59 | 3 | 0.47% |
| 09:00-09:59 | 1 | 0.16% |

| 10:00-10:59 | 8 | 1.26% |
|-------------|---|-------|
| 11:00-11:59 | 2 | 0.32% |

Duration

The category of **Duration** is interesting in that it represents the *subjective* length of time the UFO experience lasted. In other words, this is the length of time the sighting lasted as estimated by the witness. Naturally, these times are greatly suspect because it is known that people tend to badly misjudge the flow of time. However, *some* people can be good at estimating time, so this value has some importance. Although an estimate of "one hour" may be in error by several minutes, it is unlikely that the true duration would be, for example, one *minute*. Furthermore, there have been cases when a UFO was observed and clocked very accurately, so that we can be reasonably certain that UFO events can last considerable periods of time.

The average duration of UFO sightings in Canada in 2006 was found to be about 27 minutes. This is a significant length of time, and suggests some simple explanations. Previous analyses have shown that long-duration sightings tend to occur in the early morning hours, from about midnight until 6:00 a.m. It is probable that the majority of these observations are of astronomical objects, moving slowly with Earth's rotation.

The duration of a sighting is one of the biggest clues to its explanation. Experience in studying UFO reports has shown us that short duration events are usually fireballs or bolides, and long duration events of an hour or more are very probably astronomical objects. In between, there can be no way to distinguish conventional objects from UFOs solely with **Duration** data. One study by an Ontario UFO group which timed aircraft observations found that the duration of such sightings varied between 15 seconds to more than eight minutes. Therefore, sightings with durations in this range could very well be aircraft, providing other observational data do not contradict such an explanation.

(continued on next page)

| Average = 1605 sec. | |
|-----------------------|--------|
| | |
| Duration (in seconds) | Number |
| 1 to 5 | 65 |
| 6 to 10 | 21 |
| 11 to 20 | 14 |
| 21 to 60 | 51 |
| 61 to 120 | 31 |
| 121 to 180 | 10 |
| 181 to 300 | 48 |
| 301 to 600 | 23 |
| 601 to 1800 | 42 |
| 1801 to 3600 | 24 |
| > 3600 | 40 |

Colour

In cases where a colour of an object was reported by witnesses, the most common colour in 2006 was "multicoloured." The next most common colour was white. Next in order were orange, silver, red and green. Since most UFOs are nocturnal starlike objects, the abundance of white objects is not surprising. Colours such as red, orange, blue and green often are associated with bolides (fireballs). The "multicoloured" designation is problematic in that it literally covers a wide range of possibilities. Some studies of UFO data have partitioned the category of **Colour** to include both A primary@ and A secondary@ colours in cases where the observed UFO had more than one colour. The multicoloured label has been used, for example, when witnesses described their UFOs as having white, red and green lights. (Many of these are certainly stars or planets, which flash a variety of colours when seen low on the horizon. Aircraft also frequently are described as having more than one colour of light.) For our study, the **Colour** classification refers only to the primary colour in the witness' description.

| ALL SIGHTINGS | | COLOUR OF NOCTURNAL LIGHTS | |
|------------------------|--------|----------------------------------|--------|
| Colour | Number | Colour | Number |
| Amber | 4 | Amber | 4 |
| Black | 3 | Black | 0 |
| Blue | 19 | Blue | 16 |
| Brown | 1 | Gold | 3 |
| Gold | 3 | Green | 22 |
| Green | 23 | Grey | 3 |
| Grey | 15 | Multi-coloured | 84 |
| Multi-coloured | 101 | Orange | 45 |
| Orange | 56 | Pink | 1 |
| Pink | 1 | Purple | 1 |
| Purple | 1 | Red | 19 |
| Red | 23 | Silver | 4 |
| Silver | 26 | White | 69 |
| White | 87 | Yellow | 15 |
| Yellow | 17 | | |
| | | COLOUR OF | |
| COLOUR OF FIREBALLS | | POINT SOURCE LIGHTS | |
| Colour | Number | Colour | Number |

| Blue | 4 | Black | 0 |
|--------|---|----------------|----|
| Gold | 0 | Blue | 1 |
| Green | 2 | Green | 1 |
| Muliti | 2 | Grey | 2 |
| Orange | 2 | Multi-coloured | 16 |
| Pink | 0 | Orange | 8 |
| Red | 2 | Pink | 0 |
| Silver | 0 | Red | 3 |
| White | 2 | Silver | 0 |
| Yellow | 2 | White | 15 |
| | | Yellow | 1 |

Witnesses

The average number of witnesses per case between 1989 and 2006 is approximately 2.00. This value has fluctuated between a high of 2.4 in 1996 to as low as 1.4 in 1990. In 2006, the average number of witnesses per case was 1.88.

This indicates that the typical UFO experience has **more than one witness**, and supports the contention that UFO sightings represent observations of real, physical phenomena, since there is usually a corroborator present to support the sighting.

Number of Witnesses

| # Witnesses | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | >10 |
|-------------|-----|-----|----|----|----|---|---|---|---|----|-----|
| Number | 324 | 184 | 40 | 18 | 10 | 6 | 1 | 2 | 1 | 2 | 5 |

Average: 1.88

Total # of witnesses in cases where exact # of witnesses known: 1,114

Shape

Witnesses' descriptions of the shapes of UFOs vary greatly. In 2006, 16 per cent were of "point sources", that is, "starlike" objects. The next most common shapes were "ball," with nine per cent and "triangle" at seven per cent. The classic "flying saucer" or disc-shaped object comprised only slightly more than five per cent of all UFO reports, contrary to popular opinion.

The shape of a perceived object depends on many factors such as the witness= own visual acuity, the angle of viewing, the distance of viewing and the witness' own biases and descriptive abilities. Nevertheless, in combination with other case data such as duration, shape can be a good clue towards a UFO's possible explanation.

| Shape | Number |
|--------------------------------|--------|
| Ball/Globe/Round/Orb | 68 |
| Boomerang/Crescent/Chevron/V/U | 12 |
| Cigar/Sphere/Cylinder | 41 |
| Cone | 3 |
| Diamond | 5 |
| Disk/Saucer/Circle | 41 |
| Irregular | 5 |
| Oval/Egg/Elliptical | 31 |
| Point Source | 119 |
| Rectangle | 4 |
| Square | 2 |
| Triangle | 54 |
| Other | 25 |

Strangeness

The assigning of a **Strangeness** rating to a UFO report is based on a classification adopted by researchers who noted that the inclusion of a subjective evaluation of the degree to which a particular case is in itself unusual might yield some insight into the data. For example, the observation of a single, stationary, starlike light in the sky, seen for several hours, is not particularly unusual and might likely have a prosaic explanation such as that of a star or planet. On the other hand, a detailed observation of a saucershaped object which glides slowly away from a witness after an encounter with greyskinned aliens would be considered highly strange.

The numbers of UFO reports according to strangeness rating show an inverse relationship such that the higher the strangeness rating, the fewer reports. The one exception to this relationship occurs in the case of *very* low strangeness cases, which are relatively few in number compared to those of moderate strangeness. It is suggested this is the case because in order for an observation to be considered a UFO, it must usually rise above an *ad hoc* level of strangeness, otherwise it would not be considered strange at all.

The average strangeness rating for UFO reports during 2003, for example, was only 3.6, where 1 is considered not strange at all and 9 is considered exceptionally unusual. But in 2006, this value rose to 4.7, showing a significant shift towards unusual qualities in the reports, though most UFOs reported are of objects which do not greatly stretch the imagination. Hollywood-style flying saucers are, in reality, relatively uncommon in UFO reports.

Reliability

The average **Reliability** rating of Canadian UFO reports in 2006 was 5.2, similar to other years, indicating that there were approximately the same number of higher quality cases as those of low quality. Low reliability was assigned to reports with minimal information on the witness, little or no investigation and incomplete data or description of the object(s) observed. Higher reliability cases might include actual interviews with witnesses, a detailed case investigation, multiple witnesses, supporting documentation and other evidence. Since data for many cases are taken from websites and second-hand postings, or in fact self-postings, there is usually no significant investigation of UFO sightings. Well-investigated cases likely comprise only a small fraction of all UFO data, a fact that makes posted UFO case data have limited value.

Reliability and **Strangeness** ratings tend to vary in classic bell-shaped curves. In other words, there are very few cases which were both highly unusual and well-reported. Most cases are of medium strangeness and medium reliability. These are the high-quality unknowns which will be discussed in a later section of this study. However, there are also very few low-strangeness cases with low reliability. Low-strangeness cases, therefore, tend to be well-reported and probably have explanations.

Sources

UFO data used in this study were supplied by many different groups, organizations, official agencies and private individuals. Since this annual survey began in the late 1980s, more and more cases have been obtained and received via the Internet.

In 2006, about 22 per cent of the total cases were obtained through the private and non-profit National UFO Reporting Center in the USA, which has a toll-free telephone number for reporting UFOs and a large sightings list created through voluntary submission of online report forms by witnesses. One can speculate that if there were a well-advertised toll-free number and accompanying website for reporting UFOs in each Canadian province, perhaps yearly report numbers would increase dramatically.

The Houston BC Centre for UFOs (HBCCUFO) had 21 per cent; it had a toll-free number for reporting UFOs in Canada for part of the year, closing in the fall. The drop in UFO report numbers in 2006 may have been partly due to this factor. Less than three per cent of the cases in 2006 came as a result of information obtained through Transport Canada and the Department of National Defence. As noted earlier, the Meteorites and Impacts Advisory Committee (MIAC) and the American Meteor Society (AMS) were not consulted for fireball reports in 2006.

It should be noted that the preparation of this Survey is becoming quite challenging. Few UFO investigators or researchers actually submit case data to UFOROM anymore, requiring considerable searching of online sources. And, although many sites post information about UFO sightings, very little actual UFO investigation is being conducted. In fact, it could be said that the science of UFO investigation has nearly become extinct. This does not bode well for an area of study that is under constant criticism by debunkers wishing to prove the unscientific nature of the subject.

Evaluation (Explanations)

The breakdown by **Evaluation** for 2006 cases was similar to results from previous years. There were four operative categories: **Explained, Insufficient Information**, **Possible or Probable Explanation**, and **Unknown (or Unexplained)**. It is important to note that a classification of **Unknown** does *not* imply that an alien spacecraft or mysterious natural phenomenon was observed; no such interpretation can be made with certainty, based solely on the given data (though the probability of this scenario is technically never zero).

In most cases, an Evaluation is made subjectively by both the contributing investigators and the compilers of this study. The category of **Unknown** is adopted if the contributed data or case report contains enough information such that a conventional explanation cannot be satisfactorily proposed. This does *not* mean that the case will never be explained, but only that a viable explanation is not immediately obvious. Cases are also re-evaluated periodically as additional data or information is brought to attention or

obtained through further investigation.

Since 1989, the average proportion of **Unknowns** has been about 13 per cent per year. In 2006, this was about 12 per cent. This is a relatively high figure, implying that almost one in eight UFOs cannot be explained. However, there are several factors which affect this value.

The level and quality of UFO report investigation varies because there are no explicit and rigourous standards for UFO investigation. Investigators who are "believers" might be inclined to consider most UFO sightings as mysterious, whereas those with more of a skeptical predisposition might tend to subconsciously (or consciously) reduce the **Unknowns** in their files.

During the first few years of these studies, an evaluation of **Explained** was almost nonexistent. At first, contributors tended to ignore UFO sightings that had a simple explanation and deleted them as actual UFO data. Hence, the only UFO reports submitted by contributors tended to be high-strangeness cases. Contributors were then encouraged to submit data on all UFO reports they received, so that a more uniform assessment and evaluation process could be realized. Because many IFO cases such as fireballs and meteors are initially reported as UFOs, the **Explained** category was considered necessary for a full review of UFO data. As noted previously, early American studies of UFO data included such cases, so present-day comparative studies should include such data as well. Furthermore, since there are no absolutes, the subjective nature of assigning **Evaluations** is actually an interpretation of the facts by individual researchers.

The process of evaluating UFO sightings is often complex, involving a series of steps that take into account errors of observation and unpredictable but natural phenomena. Checks with star charts, police, air traffic control operators and meteorologists are often performed. Where possible, witnesses are interviewed in person, and sketches or photographs of the area may be examined. The intent is to eliminate as many conventional explanations as possible before allowing an evaluation or conclusion.

(continued on next page)

TABLE 4
Evaluation of Canadian UFO Data

| % | | | | |
|---------|-----------|--------------------------|----------|-------------|
| | Explained | Insufficient Evidence | Probable | Unexplained |
| 1989 | 0.00% | 52.50% | 33.30% | 14.20% |
| 1990 | 0.00% | 46.40% | 40.20% | 13.40% |
| 1991 | 1.20% | 48.50% | 41.80% | 8.50% |
| 1992 | 8.00% | 37.00% | 33.00% | 22.00% |
| 1993 | 31.50% | 34.80% | 23.50% | 10.20% |
| 1994/95 | 19.10% | 33.30% | 35.20% | 12.40% |
| 1996 | 9.30% | 40.70% | 33.70% | 16.30% |
| 1997 | 6.00% | 37.30% | 43.00% | 13.70% |
| 1998 | 5.10% | 38.70% | 44.80% | 11.30% |
| 1999 | 3.80% | 31.50% | 51.90% | 12.70% |
| 2000 | 8.75% | 35.74% | 42.59% | 12.93% |
| 2001 | 5.88% | 34.76% | 44.12% | 15.24% |
| 2002 | 2.48% | 39.75% | 39.75% | 18.01% |
| 2003 | 16.34% | 24.67% | 42.50% | 16.49% |
| 2004 | 8.62% | 22.68% | 53.17% | 15.53% |
| 2005 | 12.09% | 25.36% | 47.85% | 14.69% |
| 2006 | 7.07% | 44.84% | 36.28% | 11.82% |

| # | | | | |
|---------|-----------|--------------------------|----------|-------------|
| | Explained | Insufficient Evidence | Probable | Unexplained |
| 1989 | 0 | 74 | 47 | 20 |
| 1990 | 0 | 90 | 78 | 26 |
| 1991 | 2 | 80 | 69 | 14 |
| 1992 | 17 | 83 | 74 | 49 |
| 1993 | 154 | 170 | 115 | 50 |
| 1994/95 | 71 | 124 | 131 | 46 |
| 1996 | 24 | 105 | 87 | 42 |
| 1997 | 17 | 106 | 122 | 39 |
| 1998 | 10 | 75 | 87 | 22 |
| 1999 | 10 | 82 | 135 | 32 |
| 2000 | 23 | 94 | 112 | 34 |
| 2001 | 22 | 130 | 165 | 57 |
| 2002 | 12 | 192 | 192 | 87 |
| 2003 | 110 | 166 | 286 | 111 |
| 2004 | 76 | 200 | 469 | 137 |
| 2005 | 93 | 195 | 368 | 113 |
| 2006 | 52 | 330 | 267 | 87 |
| | 693 | 2296 | 2804 | 966 |

There were 87 **Unknowns** out of 738 total cases in 2006. If we look only at the **Unknowns** with a **Strangeness** of 6 or greater and a **Reliability** rating of 7 or greater, we are left with 7 high-quality **Unknowns** in 2006 (about one per cent of the total). This is slightly lower than previous studies, where values closer to three or four per cent were noted. As a comparison, USAF Blue Book studies found three to four per cent of

their cases were "excellent" Unknowns.

It should be emphasized again that even high-quality **Unknowns** do not imply alien visitation. Each case may still have an explanation following further investigation. And of those that remain unexplained, they may remain unexplained, but still are not incontrovertible proof of extraterrestrial intervention or some mysterious natural phenomenon.

Summary of Results

As with previous studies, the 2006 Canadian UFO Survey does not offer any positive proof that UFOs are either alien spacecraft or a specific natural phenomenon. However, it does show that some phenomenon which often is called a UFO *is* continually being observed by witnesses.

The typical UFO sighting is that of two people together observing a moving, distant white or red light for several minutes. In most cases, the UFO is likely to be eventually identified as a conventional object such as an aircraft or astronomical object. However, in a small percentage of cases, some UFOs do not appear to have an easy explanation and may be given the label of "unknown."

What are these "unknowns?" From a completely scientific standpoint, we have no way of extrapolating a definitive explanation based on this data. Biases for or against the view that UFOs are extraterrestrial spacecraft often hinder the scientific process and cloud the issue. A "debunker" who has a strong belief that UFO reports are all fabrications or misinterpretations may tend to dismiss a truly unusual case out of hand, whereas a "believer" who believes aliens are indeed visiting Earth may read something mysterious into a case with a conventional explanation.

All that a study of this kind can do is present the data and some rudimentary analyses. The recognition that there really are only a handful of higher-quality unknowns among the mass of UFO cases might lead a debunker to believe they, too, might find an explanation if enough effort were to be expended, but to a believer this might be the required proof that some UFOs have no explanations.

The **Evaluation** value is a subjective value imposed by the investigator or compiler (or both) with a scale such that the low values represent cases with little information content and observers of limited observing abilities and the higher values represent those cases with excellent witnesses (pilots, police, etc.) and also are well-investigated. Naturally, cases with higher values are preferred.

The interpretation of the 87 Unknowns is that these cases were among the most challenging of all the reports received in 2006. It should be noted that most UFO cases go unreported, and that there may be ten times as many UFO sightings that go unreported as those which get reported to public, private or military agencies.

Furthermore, it should be noted that some cases with lower reliability ratings suffer only from incomplete investigations, and that they may well be more mysterious than those on the list of Unknowns. And, above all, these cases are *not* proof of extraterrestrial visitation.

Other comments

The increase in the numbers of UFO reports with time likely does not have a simple explanation. It could be related to a growing awareness within the general population that there are agencies which collect UFO reports. It could be that there really are more UFOs physically present in the sky. It could be that the collection of UFO data is becoming more efficient. It could be that there are more private websites allowing or inviting people to report their UFO sightings. While media have been noted as playing a definite role in UFO waves (a national increase in UFO sightings), media coverage of UFO reports has significantly declined over the past decade while the number of reports has risen. Perhaps a cultural factor is at work as well, where aliens and UFOs are now well-entrenched within the societal mindset and are accepted as more probable than fiction. This question by itself is deserving of scientific study.

UFO witnesses range from farmhands to airline pilots and from teachers to police officers. Witnesses represent all age groups and racial origin. What is being observed? In most cases, only ordinary objects. However, this begs a question. If people are reporting things that can be explained, then the objects they observed were "really" there. Were the objects we can't identify "really" there as well? If so, what were they?

These are questions that only continued and rational research can answer, and only if researchers have the support and encouragement of both scientists and the public.

Contributing Organizations

AUFOSG (Alberta UFO Study Group)

http://www.aufosg.com

e-mail: aufosg2003@yahoo.ca (Jim Moroney)

National UFO Reporting Center

http://www.ufocenter.com

e-mail: <u>director@ufocenter.com</u> (Peter Davenport)

e-mail: <u>dledger@ns.sympatico.ca</u> (Don Ledger)

MUFON Ontario

http://www.virtuallystrange.net/ufo/mufonontario/mufonindex.html

e-mail: <u>mufonont@virtuallystrange.net</u> (Errol Bruce-Knapp)

HBCC UFO Research

http://www.hbccufo.com

e-mail: hbccufo@telus.net (Brian Vike)

UFO*BC

http://www.ufobc.ca

e-mail: dave@ufobc.ca (Dave Pengilly)

et al.

UFOROM (Ufology Research of Manitoba)

http://www.geocities.com/Athens/Delphi/7998

e-mail: canadianuforeport@hotmail.com (Chris Rutkowski)

e-mail: <u>LOCTL789@hotmail.com</u> (Geoff Dittman)

UFO Updates

http://www.virtuallystrange.net/ufo/updates

e-mail: <u>ufoupdates@virtuallystrange.net</u> (Errol Bruce-Knapp)

UFO Roundup

http://ufoinfo.com/roundup

e-mail: masinaigan@aol.com (Joseph Trainor)

Filer's Files

http://www.filersfiles.com

e-mail: majorstar@aol.com (George Filer)

Paranormal Phenomena Research & Investigation (PPRI) (Nova Scotia)

http://www.ppri.cjb.net

e-mail: foxmulder@accesscable.net

Transport Canada

Department of National Defence

Royal Canadian Mounted Police