Ruby - Bug #14406

File.expand_path doesn't expand tilde inside Windows home directory

01/26/2018 04:29 PM - abotalov (Andrei Botalov)

Status:	Rejected		
Priority:	Normal		
Assignee:			
Target version:			
ruby -v:	2.5.0	**Backport:**	2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN

Description

TMP environment variable on Windows is set to a name that contains a tilde. File.expand_path doesn't currently return an expanded name. I would expect it to do so as its documentation says:
"Converts a pathname to an absolute pathname."
"The given pathname may start with a "~", which expands to the process owner's home directory"

Example on my system:

```
irb(main):085:0> File.expand_path(Dir.tmpdir)
=> "C:/Users/ANDREI~1/AppData/Local/Temp"
irb(main):086:0> File.absolute_path(Dir.tmpdir)
=> "C:/Users/ANDREI~1/AppData/Local/Temp"
```

History

#1 - 01/26/2018 04:42 PM - Hanmac (Hans Mackowiak)

you are wrong it means something different:

```
File.expand_path("~") #=> "C:/Users/h.mackowiak"
```

you thing are FAT paths which got that shortage because of "8.3 filename"
https://en.wikipedia.org/wiki/8.3_filename

ruby might not be able to do much about that

#2 - 01/27/2018 05:45 AM - nobu (Nobuyoshi Nakada)

- Description updated

- Status changed from Open to Rejected

abotalov (Andrei Botalov) wrote:

> TMP environment variable on Windows is set to a name that contains a tilde.

"Containing" doesn't mean "starting with".

```
irb(main):085:0> File.expand_path(Dir.tmpdir)
=> "C:/Users/ANDREI~1/AppData/Local/Temp"
irb(main):086:0> File.absolute_path(Dir.tmpdir)
=> "C:/Users/ANDREI~1/AppData/Local/Temp"
```

These contain a tilde, but do *not* start with.

#3 - 01/29/2018 09:38 AM - Hanmac (Hans Mackowiak)

@abotalov:
you need to call GetLongPathName https://msdn.microsoft.com/en-us/library/windows/desktop/aa364980(v=vs.85).aspx
using win32api or fiddle

the win32api would look like that:

```
require "tmpdir"
def get_long_win32_filename(short_name)
```

```
    require 'win32api'
    win_func = Win32API.new("kernel32","GetLongPathName","PPL","L")
    buf = 0.chr * 256
    buf[0..short_name.length-1] = short_name
    win_func.call(short_name, buf, buf.length)
    return buf.split(0.chr).first
end
p get_long_win32_filename(Dir.tmpdir)
```

don't know how much complicated it would be with fiddle

#4 - 01/29/2018 06:40 PM - davispuh (Dāvis Mosāns)

I wrote a patch for this with [#12656](#)