

Western Kentucky

| Year | Seed | Opponent | Seed | Score | Opp Score | W | L | OT | Round |
|------|------|------------------|------|-------|-----------|----|----|----|----------------------|
| 1940 | | Duquesne | | 29 | 30 | 0 | 1 | 0 | Elite Eight |
| 1960 | | Miami, Florida | | 107 | 84 | 1 | 1 | 0 | Round of 32 |
| | | Ohio State | | 79 | 98 | 1 | 2 | 0 | Sweet Sixteen |
| | | Ohio | | 97 | 87 | 2 | 2 | 0 | Regional Third Place |
| 1962 | | Detroit | | 90 | 81 | 3 | 2 | 0 | Round of 32 |
| | | Ohio State | | 73 | 93 | 3 | 3 | 0 | Sweet Sixteen |
| | | Butler | | 86 | 87 | 3 | 4 | 1 | Regional Third Place |
| 1966 | | Loyola, Illinois | | 105 | 86 | 4 | 4 | 0 | Round of 32 |
| | | Michigan | | 79 | 80 | 4 | 5 | 0 | Sweet Sixteen |
| | | Dayton | | 82 | 62 | 5 | 5 | 0 | Regional Third Place |
| 1967 | | Dayton | | 67 | 69 | 5 | 6 | 1 | Round of 32 |
| 1970 | | Jacksonville | | 96 | 109 | 5 | 7 | 0 | Round of 32 |
| 1971 | | Jacksonville | | 74 | 72 | 6 | 7 | 0 | Round of 32 |
| | | Kentucky | | 107 | 83 | 7 | 7 | 0 | Sweet Sixteen |
| | | Ohio State | | 81 | 78 | 8 | 7 | 1 | Elite Eight |
| | | Villanova | | 89 | 92 | 8 | 8 | 2 | National Semifinals |
| | | Kansas | | 77 | 75 | 9 | 8 | 0 | National Third Place |
| 1976 | | Marquette | | 60 | 79 | 9 | 9 | 0 | Round of 32 |
| 1978 | | Syracuse | | 87 | 86 | 10 | 9 | 1 | Round of 32 |
| | | Michigan State | | 69 | 90 | 10 | 10 | 0 | Sweet Sixteen |
| 1980 | 10 | Virginia Tech | 7 | 85 | 89 | 10 | 11 | 1 | Round of 64 |
| 1981 | 10 | UAB | 7 | 68 | 93 | 10 | 12 | 0 | Round of 64 |
| 1986 | 8 | Nebraska | 9 | 67 | 59 | 11 | 12 | 0 | Round of 64 |
| | 8 | Kentucky | 1 | 64 | 71 | 11 | 13 | 0 | Round of 32 |
| 1987 | 10 | West Virginia | 7 | 64 | 62 | 12 | 13 | 0 | Round of 64 |
| | 10 | Syracuse | 2 | 86 | 104 | 12 | 14 | 0 | Round of 32 |
| 1993 | 7 | Memphis | 10 | 55 | 52 | 13 | 14 | 0 | Round of 64 |
| | 7 | Seton Hall | 2 | 72 | 68 | 14 | 14 | 0 | Round of 32 |
| | 7 | Florida State | 3 | 78 | 81 | 14 | 15 | 1 | Sweet Sixteen |
| 1994 | 11 | Texas | 6 | 77 | 91 | 14 | 16 | 0 | Round of 64 |
| 1995 | 8 | Michigan | 9 | 82 | 76 | 15 | 16 | 1 | Round of 64 |
| | 8 | Kansas | 1 | 70 | 75 | 15 | 17 | 0 | Round of 32 |
| 2001 | 14 | Florida | 3 | 56 | 69 | 15 | 18 | 0 | Round of 64 |

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|------|------|--------------------|------|-------|-----------|----|----|----|---------------|
| 2002 | 9 | Stanford | 8 | 68 | 84 | 15 | 19 | 0 | Round of 64 |
| 2003 | 13 | Illinois | 4 | 60 | 65 | 15 | 20 | 0 | Round of 64 |
| 2008 | 12 | Drake | 5 | 101 | 99 | 16 | 20 | 1 | Round of 64 |
| | 12 | San Diego | 13 | 72 | 63 | 17 | 20 | 0 | Round of 32 |
| | 12 | UCLA | 1 | 78 | 88 | 17 | 21 | 0 | Sweet Sixteen |
| 2009 | 12 | Illinois | 5 | 76 | 72 | 18 | 21 | 0 | Round of 64 |
| | 12 | Gonzaga | 4 | 81 | 83 | 18 | 22 | 0 | Round of 32 |
| 2012 | 16 | Mississippi Valley | 16 | 59 | 58 | 19 | 22 | 0 | Opening Round |
| | 16 | Kentucky | 1 | 66 | 81 | 19 | 23 | 0 | Round of 64 |
| 2013 | 16 | Kansas | 1 | 57 | 64 | 19 | 24 | 0 | Round of 64 |